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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION

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MANUAL FOR HIGH SCHOOLS

Harrisburg, Pa.,
J. L. L. Kuhn, Printer to the Commonwealth
1922

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF PUBLIC INSTRUCTION

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"The first aim of education is to teach people to do better the desirable things they are going to do anyway. Another duty is to reveal higher types of activities and to make them both desired and to an extent possible."

THOMAS H. BRIGGS.

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MANUAL FOR HIGH SCHOOLS

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1. INTRODUCTION

The program of the Department of Public Instruction for secondary education has been developed from the following set of resolutions passed by the first education congress of Pennsylvania in November 19th and endorsed by the high school section of the Pennsylvania State Educational Association at its subsequent meeting in Philadelphia.

1. That the junior high school be encouraged as a distinct institution, designed to afford opportunity for try-out of various native abilities, for differentiation of opportunity, and for better educational guidance.

2. That promotion by subject be the only method used in both the junior and senior high schools.

3. That an effort be made to adapt the content of courses and methods of instruction to the needs of pupils, to the end that the failure in a well-organized school, with properly supervised instruction, should not, under normal conditions, exceed from five to ten per cent.

4. That citizenship be taught through school administration by delegating to the pupils under watchful supervision certain functions of the school government.

5. That instruction in citizenship be required in the junior and senior high school, and that ample time be provided for the requirement of this course for every pupil in the school.

6. That a definite program for educational and vocational guidance be included in the plan of every high school.

7. That courses of study be organized with a view to the largest service to all students, ninety percent of whom do not go to college. That the colleges be urged to coöperate with the high schools by giving an opportunity for higher education to those whom high school principals recommend as qualified to profit by college courses.

8. That we approve of the report of the sub-committee of the Commission on Re-organization of Secondary Education, known as the Cardinal Principles of Secondary Education, and urge that principals and superintendents keep in mind the seven fundamental objectives outlined in that report in organizing the courses of study.

9. That organized provision for regular training of all normal children of the ages of fourteen and upwards, adapting high school procedure for the reception and retention of such children, and for offering them such profitable instruction as may attract and benefit them, be accepted as an obligation of regular high schools.

10. That such administrative measures be adopted as will standardize grading and promotion of high school students to the end that the promotion of pupils be based upon reasonably uniform attainments.

At every step in the development of the program representative educators of the State have been consulted. Fundamental principles, administrative measures, and details have been worked out by commitees and then submitted by the deputy superintendent in charge of secondary education and by the inspectors and directors working with him to meetings of high school principals and teachers in practically every county of the State. The Department is endeavoring to develop a system of democratic education in a democratic way, and to that end it invites the frank criticism and suggestions of the educators of the State concerning all matters discussed in this handbook.

II. SECONDARY EDUCATION IN THE UNITED STATES

The growth of public secondary education. The first public secondary school of the United States was the English Classical School of Boston, started in 1821. One hundred years from the date of establishment of this school, we find in our country a development of public secondary education entirely unique in the world's history. Approximately 17,000 public high schools with over 2,000,000 pupils taught by 80,000 teachers testify to the interest of the American people in secondary education.

This unprecedented development has been largely the product of the last thirty years. During that time, the number of public high schools has increased 452 per cent. In large sections of the country, they are the only facilities for secondary education. In 1890, 68 per cent of all secondary pupils were in the public high schools; in 1918, this percentage had risen to 91.2 per cent. Even more startling is the increase in enrollment when compared with growth in total population. While population increased 68 per cent in these twenty-eight years, the number of high school pupils increased 710 per cent. Costs have increased out of proportion to these striking figures. Enrichment and variety of curriculums, innovations in administration, and improvements in content and methods of instruction have so revolutionized this democratic institution that the founders of that Boston school a century ago would be as bewildered by its complexities as they would by the intricacies of a modern electrical plant. Evidently the American people believe in secondary education.

Why this development. The reason for this unique and remarkable development is not difficult to find. The culmination of the industrial revolution has brought together here in America as leaders the descendants of that farmer stock that braved unknown dangers in search of religious freedom, individual achievement, and political and economic independence. Followers from among the hardiest and most venturesome of every country of civilized Europe have here sought like opportunities. Unparalleled natural resources exploited by an industrious and resourceful people aided by the increasingly efficient subjection of these natural resources to science and invention have developed the general comfort, the economic independence, and the educational interest of the people. Their improved economic resources have made it possible for more of the people to postpone through the secondary school period the necessity of financial contributions by their children. Educational advancement has not been hampered by governmental and social-class limitations. The natural

ambitions of parents for their children have, therefore, placed the full force of public opinion and sentiment behind the high school movement and made inevitable its remarkable growth.

The problem before the American high school. It becomes a problem for those officially responsible for the American high school to see to it that this individual purpose shall serve a social end, and that the school so built upon the consciousness and the affection of our people shall not only continue to provide individual opportunity, but that it shall also provide as a foundation for our democratic government and social order a large group of intelligent leaders and of discriminating followers who will place public welfare above private interest.

The high school is ideally suited to this purpose. It has charge of our youth during the years of adolescence—the most impressionable period of their lives—the period when, above all others, they are forming their habits of thought and feeling in all their social relationships. It attracts the ambitious youth of the community, from whose number will come practically all of the doctors, lawyers, preachers, teachers, editors, publicists, and leading business men. It includes also representatives of every future vocation and of every future social, economic, and political group. It is an institution which readily arouses the social consciousness and enlists the personal and group loyalty of its members. Its curriculum can include such study of man and of his social nature as will contribute to an intellectual understanding of the social laws that must control individual and group relationships. Its community activities provide for the development of emotional sanity and of practical skill in the process of coöperative activity.

In these fateful years of readjustment and reorganization, with the democratic leadership of the world on our shoulders, we must develop a mass wisdom, a mass consciousness, and a mass conscience equal to the task. Here are the leaders and the intelligent followers of tomorrow; here is an institution owned, financed, and directed in the public interest; ours must be the wisdom to avoid confusion of aim and to give purposeful direction with a clear vision of the civilization that we must build.

III. LEGAL STATUS OF THE HIGH SCHOOL

The School Code provides that the Department of Public Instruction shall classify the various high schools as junior high schools, senior high schools, and first, second, and third grade high schools. The Department will be glad to assist schools desiring changes in classification to bring the conditions of the school into harmony with the requirements of the classification desired.

Minimum requirements for the various grades of schools are as follows:

1. *For first grade high school or for senior high school.*
   Three properly qualified teachers giving full time to high school work.
   Not less than nine months' term.
   Adequate building, supplies, and equipment.
   Instruction in a four-year curriculum approved by the Department of Public Instruction, or instruction in a curriculum for grades ten, eleven, and twelve following an approved junior high school course.

2. *For a six-year high school.*
   An organization of grades seven to twelve, which shall meet the requirements for a junior high school in addition to those for a senior high school.

3. *For a second grade high school.*
   Two properly qualified teachers giving full time to high school work.
   Not less than an eight months' term.
   Adequate building, supplies, and equipment.
   Instruction in a three-year curriculum approved by the Department of Public Instruction.

4. *For a third grade high school.*
   One properly qualified teacher giving full time to high school work.
   Not less than an eight months' term.
   Adequate building, supplies, and equipment.
   Instruction in a two-year curriculum approved by the Department of Public Instruction.

5. *For a junior high school.*
   Four properly qualified teachers giving full time to high school work.
   One hundred pupils in average daily attendance.
   Instruction in grades seven, eight, and nine. Grade ten may be added if approved.
   Adequate building, supplies, and equipment.
   Approved organization and curriculum.

Temporary classification. When it is impossible to meet the regular conditions for classification, a school may be approved for temporary classification as a junior high school if conditions are such as to make a junior high school desirable.

6. *Junior high school, senior high school, elementary school.*
   Section 1701 of the School Code provides that the term *elementary school* or *elementary course* shall apply to all

grades not included among those recognized as high school grades in the classification of the Department of Public Instruction. A high school is an organization of grades seven, eight, nine, ten, eleven, and twelve, in cases where such grades or any of them are organized as a part of a junior high school, a senior high school, or a six-year high school, and are so recognized by the State Council of Education, but where such grades are not so organized, grades seven and eight shall be classified as elementary grades. A complete high school course is one requiring four years beyond an elementary course of eight years or six years beyond an elementary course of six years. The Superintendent of Public Instruction shall make such regulations as shall be necessary to insure proper standards for the various grades of the twelve years of the public school course.

7. *Determination of the class of a school.*

In addition to the provisions given above concerning the number of teachers, length of term, etc., the law provides in Section 1701 that the class to which a high school belongs shall be determined by its shortest course for graduation. In order to be classified by the Department of Public Instruction a school must not only meet the requirements of the statute, but must also provide adequate equipment and satisfactory instruction.

8. *Lengthening course in second and third grade schools.*

The lengthening of the course in a second grade high school to four years and in a third grade high school to three years may be approved if no other educational opportunities are available for the pupils of such schools. The application for such approval should give details as to the number of pupils in each year of the course, the distances between the school applying and neighboring high schools, conditions of the roads, trolley and railroad facilities, and other details necessary to an intelligent understanding of the needs of the pupils. All such applications must have the approval of the county superintendent.

Whenever permission is given to conduct a longer course than the one provided by law, such permission is given on condition that any pupil who has completed a course of statutory length may attend the nearest or most convenient school of higher grade for the remainder of the four-year course, and the local district shall be required to pay the pupil's tuition.

It should be noted that extension of the course of a second or third grade school does not change the grade of the school.

9. *Establishing high schools in fourth-grade districts.*
Section 1701 provides that no new high school shall be established in a school district of the fourth class without the consent of the State Council of Education and of the superintendent of schools of the county in which such district is located.

10. *Program of studies.*
Except in school districts of the first class, the board of school directors of every school district shall employ for its high school during the entire term a sufficient number of teachers for the teaching of any of the subjects included in the program of studies of the State Council of Education for which there shall be an application by fifteen pupils belonging to the grade in which such subject is specified in the said program of studies: Provided, that no pupil shall be counted among the applicants for such subject unless, in the judgment of the principal of the school, he is both qualified and entitled to take such subjects in the curriculum he is pursuing. This provision does not prevent the organization of any classes that a school sees fit to maintain.

Tuition, textbooks, and supplies.

1. *General principles.* Pupils residing in school districts in which no public schools are maintained may attend, during the entire term, the high schools in other districts which are nearest or most convenient to their homes. If any district maintains a high school with a course less than a complete course, pupils who have satisfactorily completed the same in the school of their own district, or have completed the equivalent of said course in some other school or schools, may attend, at the expense of the school board of the district in which they live, during the remaining years of a complete high school course, the nearest or most conveniently located high school of such class as they may desire to attend.

2. *Consent of directors.* Pupils wishing to attend high school in a district other than the one in which they reside shall obtain the consent of the board of school directors of the district in which such high school is located, before attending the same. If the district in which a pupil lives does not have a high school whose classification authorizes it to give the grade of instruction to which the pupil is entitled, or if its school is three miles or more from the pupil's home the pupil may attend the nearest or most convenient high school

without the consent of the directors of his home district, and his home district must pay the cost of tuition, textbooks, and supplies, unless transportation is furnished to the school in his home district.

3. *Certificates necessary.* Pupils desirous of having the cost of their tuition, textbooks, and supplies paid in a high school in another district, on account of having completed in a school or schools in another district the equivalent of a course in their own district, must present to the board of their own district and the board of the district in which they wish to attend, a certificate from the county superintendent who has jurisdiction over the district in which they live, that they have satisfactorily completed the equivalent of said course.

4. *Tuition paid only to public schools.* Under the provisions of Section 1707, pupils having cost of tuition, textbooks, and supplies paid by their home districts may attend only public schools in Pennsylvania. Boards are not responsible for tuition in schools of other states nor in private schools. The secondary department of a normal school is considered a public school of the State only when such department is the recognized high school of a school district.

5. *Length of term.* When a non-resident pupil attends a school, the district of his residence is liable to the district of his attendance for the cost of tuition, textbooks, and supplies for the full term in the district where he attends, even though there is a shorter term in the district of his residence.

6. *Dismissal of non-resident pupils.* After a pupil has been admitted to a school outside of his own district he is entitled to continue during the entire term for which he was admitted unless excluded for causes stated in the law, such as failure to pass medical inspection because of contagious disease, insubordination, etc.

7. *Nearest or most convenient.* The terms, *nearest or most convenient,* which are used so frequently in the law concerning the payment of tuition have been generally given a liberal interpretation by the courts. Such considerations as the time schedule of trains and conditions of roads have been held to be of vital importance in interpreting the term *convenient.*

8. *Tuition in vocational schools.* The responsibility of boards for tuition charges for vocational schools is covered by the same laws as tuition in the regular high schools.

9. *How price of tuition is decided.* Section 1708 of the School Code provides:

"The board of school directors in any district maintaining a high school which is attended by any pupils residing in another district, as herein provided, shall, at the close of the term, properly certify to the board of school directors of the district in

which such pupils reside, the names of all such pupils and the length of time they attended said high school together with the cost of tuition, textbooks, and supplies for such attendance, which shall not exceed the cost of tuition, textbooks, and supplies of other pupils in said high school pursuing similar studies for the same length of time, and the cost of such tuition, textbooks, and supplies shall, within thirty days after being so certified, be paid to the district maintaining such high school by the district to which the same was so certified.

NOTE:—The item 'tuition, textbooks and supplies' does not include interest on debt, janitor service, fuel, light, and things which have a permanent value after they are added to the school plant. Tuition includes teachers' salaries, the cost of attendance at institute, and such portion of the superintendent's or supervisor's time as is spent in the supervision of the high school. Supplies, in this section of the code, include pencils, pens, ink, crayon, tablets and things which perish with the using."

Section 1711 provides:

"The board of school directors of any district in which there is located a high school receiving a share of any appropriation for the salaries of high school teachers shall deduct its share of the last such appropriation received from the total cost of tuition, textbooks, and supplies, before computing the cost per pupil, in order to certify properly the expense for pupils attending the same from other districts."

10. *Agreement of boards.* Section 1404 of the School Code provides that the board of school directors of any district in this Commonwealth may, on account of convenience of access, or other reasons, permit any pupils to attend the schools of another district, on such terms as the two boards of school directors may mutually agree upon.

11. *Distance from school.* A pupil qualified for high school residing three or more miles from the nearest high school in his own district may attend a more convenient high school in another district, and the district in which he resides shall be liable for his tuition. The pupil's home district is not, however, responsible for tuition in such a case, provided it furnishes free transportation to its own high school.

Transportation

1. *Rights and obligations of directors.* The board of school direcors of any district in this Commonwealth may, out of the funds of the district, provide for the free transportation of any pupil to and from the public schools. They are not legally required to provide transportation unless a high school within the district has been closed since the passage of the School Code in 1911.

The decision of the courts has emphasized the responsibility of school directors in conducting public schools and providing adequate and reasonable opportunities for the children of the Commonwealth to attend them. The refusal of a board to transport must be based upon

the exercise of sound discretion where the circumstances are such that it is not reasonably possible to provide transportation. It is also a primary duty of the parents to do their part in securing such transportation. They are equally responsible with the school board.

2. *Schools closed to secure better facilities.* Where any of the public schools of this Commonwealth are closed for any of the purposes provided in Section 1406, except for low atendance, pupils residing one and one-half miles or more from the school to which they are assigned shall be transported at the cost of the district. When schools are closed because there are ten or less than ten pupils regularly enrolled, one-half the cost of such transportation, not to exceed one dollar per diem per pupil, shall be paid by the Commonwealth, provision for which shall be made by separate appropriation in the general appropriation act.

3. *Measurement of distance.* The distance between the pupil's home to the school shall be measured from the school building to which the pupil has been assigned by the highway to the nearest point where a private way or private road connects the dwelling house of the pupil with said highway.

4. *Compulsory attendance.* If a pupil between eight and sixteen years of age has completed the work of the elementary schools and has a superintendent's certificate to that effect, he is exempt from the provisions of the Compulsory Attendance Law unless there is a high school within two miles of his home, or unless transportation is provided for him by the district. Any pupil not exempt for the reasons given is subject to the provisions of the Compulsory Attendance Law the same as a pupil attending the elementary schools.

A pupil's home district is responsible for the enforcement of the Compulsory Attendance Law.

High School Teachers.

1. *Certification.* In order to be eligible to teach in a public high school of Pennsylvania a teacher must be the holder of one of the following certificates: Partial Secondary, Standard, College.

A partial secondary certificate is issued upon the completion of two years of post-high-school study together with six semester hours of professional training. This certificate is good for one year, and is renewable upon six further semester hours of professional training. It entitles the holder to teach such subjects as have been pursued for at least twelve semester hours in the post-high-school period.

A standard certificate is issued upon evidence of the completion of a four year high school course or equivalent education and two years (seventy semester hours) or the equivalent of professional training for teaching. Observation, participation and practice teaching of

not less than six semester hours or its equivalent must form a part of this requirement.

This certificate is valid for two years and is renewable upon a rating of "low" or better. Subsequent renewals require a rating of "middle" or better.

This certificate may become permanent at the end of its first period or of any subsequent renewal period on a rating of "middle" or better and evidence of four years of successful teaching experience.

In art education, commercial education, health education, home economics or music, not less than three years of approved training beyond high school grade in the specified field shall be required for a Standard Permanent Certificate.

College certificates are issued to all graduates of approved colleges who have completed not less than eighteen semesters hours of prescribed professional study. College certificates are valid for three years and become permanent at the end of that time on evidence of successful teaching experience and six additional semester hours of professional study.

Teachers now in the service of the public school system of Pennsylvania are given credit for successful teaching experience at the rate of four semester hours per year where the teacher rating is middle or better, and at the rate of three semester hours per year where the rating is less than middle.

No teacher shall be employed to teach any branch other than those enumerated in his certificate.

2. *Sickness.* Directors may pay teachers for time lost through sickness or other unavoidable circumstances. In case of sickness, no payment shall be made unless the teacher furnishes a certificate from a physician stating the nature of the sickness with the statement that he or she was unable to perform the duties of a teacher.

3. *Closing schools for contagious disease.* When a board of directors has been obliged to close a school because of contagious disease, damage by fire, or other causes, such board of directors is liable for payment of salary to the teachers who are thus prevented from doing their work as teachers. The board must compensate the teacher at the rate specified in the contract between the board and the teacher. This compensation shall extend over the period of time during which the school is closed, and shall be in addition to the sums paid the teacher for his services while actually engaged in performing his duties.

4. *Teachers' pension fund.* The school Employees' Retirement System was created by Act of Assembly (School Code 5601) to become effective July 1, 1919. Its membership consists of (a) all persons who were school employees at the time the system went into

effect, and who elected to become members (b) all persons who enter the school service after July 1, 1919.

The plan is administered by a board of seven members, including the Superintendent of Public Instruction, the State Treasurer, one member appointed by the Governor of the Commonwealth, and elected members.

The funds are obtained through contributions by the members and the contribution by the Commonwealth of specified amounts which are appropriated by the Legislature, based upon actuarial estimates. Contributions from the members are forwarded by the employer regularly. The employer must deduct from every payroll of a member such a percentum of the total amount of salary as the Retirement Board, under the advice of its actuary, shall require. No deduction is made for that part of a contributor's salary which is in excess of $2,000 per annum.

If a member separates from the school service in any other way than by death or retirement, he may receive the full amount of deductions made from his salary with compound interest; or he may elect to receive an annuity or deferred annuity, which shall be the actuarial equivalent of his accumulated deductions.

An employe who has separated himself from the school system may return within three years, upon restoration of his accumulated deductions as they were at the time of separation.

In the event of a member's death before retirement, his accumulated deductions shall be paid to his estate or some designated person.

A member who has reached the age of 62 is eligible for superannuation retirement. A member beyond that age may continue in active service until he is 70, but he is not required to make further contributions to the system.

A contributor may be retired upon disability before the age of 62, upon certification of disability by a physician, provided that said contributor has had ten or more school years of school service. The retirement board may require a yearly medical examination of a disability annuitant, and upon such evidence may discontinue or reduce the annuity paid the contributor.

Upon retirement for disability, the contributor shall receive an allowance of one-ninetieth of his final salary mutiplied by the number of his years of service; this shall in no case be less than thirty per centum of his final salary, nor shall it be more than eight-ninths of the allowance to which he would have been entitled had retirement been deferred until age 62.

A contributor who has reached the age of 62 may retire upon filing with the Retirement Board a written statement. Every contributor who has attained the age of 70 shall be retired forthwith, or at the end of the school term in which said age of 70 years is attained.

Such a contributor shall receive one-eightieth of his final salary for each year of service prior to 62 years, his total annuity not to exceed fifty percentum of his final salary.

Final salary means the average annual salary, not exceeding $2,000, earned by a contributor as an employe for the ten years of service immediately preceding retirement.

Joint schools. The chapter on "Essentials of Secondary School Opportunities" emphasizes the importance of an organization large enough to afford some variety of curriculums. In many communities this end can be secured only by combining the facilities of two or more districts. In most subjects a teacher can instruct a class of twenty-five pupils as cheaply as a class of a half dozen or less. Consolidation, therefore, will often make possible economies sufficient to provide transportation and to add types of instruction impossible in a smaller school.

Section 1801 of the School Code gives in detail the steps necessary to effect such an organization. It is important that such schools be organized in strict conformity with the law.

The legislature of 1921 provides in Section 127 for the merging of two or more school districts into a single district. In many cases this will prove the most satisfactory method of providing a high school large enough to be of greatly increased efficiency.

Vocational schools.

1. *Establishment.* Vocational classes (industrial, agricultural, home economics, and continuation) may be established either in connection with, or distinct from regularly organized high schools. Special vocational schools may be established where needed. All such vocational classes and vocational schools must be organized and conducted in accordance with Sections 3406-3417 of the School Code.

2. *Reimbursement.* Approved vocational classes and schools are entitled to reimbursement from State and Federal vocational funds to an amount equal to two-thirds the sum which has been expended for instruction, provided no one school district shall receive more than five thousand dollars in any one school year from State vocational funds.

State scholarship examination.

In order to assist worthy graduates of secondary schools of the State to obtain a higher education, the Legislature (Sections 4301-4305 School Code) in 1919 made possible the awarding, in each county or senatorial district, of at least one scholarship. Each scholarship award amounts to $400 toward a four year college education. The law requires that the State Council of Education shall make the ap-

pointment to these scholarships on the basis of competitive examination.

The rules regulating the conduct of examinations and the award of the scholarships, adopted by the State Council of Education, are as follows:

1. *Date of examinations.* The State Scholarship Examinations shall be held on the first Friday in May of each calendar year.

2. *Time for examinations.* The examinations will be held from 9:00 A. M. to 1:30 P. M.

Place of examinations. The examinations will be conducted in all first grade high schools in Pennsylvania where one or more candidates make application before the first of April preceding the date of examination, except that in cities having more than one first grade school the examination will be held in the school or schools designated by the Department of Public Instruction.

3. *Subjects offered in examinations.* Each candidate will be examined in English, including composition and literature, American history, and one of the following: Mathematics, including algebra and plane geometry, Latin, German, French, Spanish, biology, physics, chemistry.

4. *Instructions for the principal.* The principal of each high school where there are eligible candidates shall clearly announce the nature, the purpose, and the date of the examination to all eligibles at least one month prior to the date of examination. He shall submit to the Department of Public Instruction not less than twenty days before the examination, a complete list of all applicants for the examination, including the following data for each candidate:

Name in full .....

Place of residence:

County .....

Borough or City .....

Street and Number .....

State .....

Senatorial District .....

Name of High School .....

Year when candidate will graduate .....

When candidate expects to enter college .....

College candidate expects to attend .....

5. *General instructions for examiner and candidates.* The sealed package containing the examination questions shall not be opened until 8:45 A. M. on the day scheduled for the examination.

The examiner should prepare an alphabetical list of candidates. Each candidate should check his papers in the presence of the examiner by writing the subjects of the answer papers he submits opposite his name on the list prepared by the examiner. This is important.

At the close of the examination the examiner shall send all answers together with the alphabetical list of candidates by express, collect, to the Department of Public Instruction, Harrisburg, Pa.

If any corrections or suggestions in regard to the examination questions are made to the candidates by the examiner such corrections shall be repeated fully in writing on the examination list that is sent to the Department of Public Instruction.

The candidate's name and permanent address (including county) must be distinctly written on every sheet of paper containing answers. All sheets comprising any examination must be securely fastened in a separate manuscript.

All manuscripts of each candidate must be securely fastened together.

The examination papers of each candidate must have attached thereto a form, completely filled out, containing the data as to name, residence, etc., called for in blank at the top of the page.

The following directions must be carefully followed:

1. All examinations must be written in ink.
2. Write proper headings for your papers, and number your work according to the number on the question papers.
3. Use one side of examination paper only.
4. Time allowed—9:00 A. M. to 1:30 P. M. All papers are to be collected at 1:30 P. M.
5. The amount of time to be allotted to each subject is left to the discretion of the candidate.
6. Each examination must be begun on a separate sheet of paper.
7. No answer paper in any subject conspicuously faulty in English composition will be given a passing grade.

6. *Eligibility.* Any student graduating in February or June from a four year course in any high school of first grade standing in Pennsylvania is eligible for the examination in May of the year of such graduation.

Graduates of four year courses in private and parochial schools which are accredited as first grade schools by the Department of Public Instruction are eligible.

Any eligible candidate presenting himself for examination shall be admitted. In case of doubt on the part of the examiner, let the candidate go on with the examination; submit a statement of his case, and the Department will later determine his eligibility.

7. *Award of scholarship.* The award of scholarships shall be announced by the State Superintendent of Public Instruction to the candidate in each county or senatorial district who receives the highest rating for his county or district. The announcement will be made as soon as possible after the records have been completed.

Persons to whom scholarships are available must attend a college or university in Pennsylvania approved by the State Council of Education. These scholarships are awarded only to students who pursue regular four year college courses leading to the B. A., B. S., or equivalent degrees.

Each candidate to whom an award has been made must return the Certificate of Acceptance or Rejection, properly filled out, within ten days following the date when the award was made.

Should a successful candidate fail to enter college during the fall term of the year in which he receives the award, the scholarship will be forfeited.

In case of rejection or forfeiture of the award, the scholarship shall be given to the candidate standing next highest on the list in his county, provided the candidate has a satisfactory standing.

In counties or senatorial districts entitled to a scholarship where only one candidate is examined, the award shall be made to that candidate provided he passes a satisfactory examination.

Note 1. A list of the colleges and universities in Pennsylvania, approved by the State Council of Education, will be furnished by the Department.

Note 2. Examination and award of scholarship does not carry with it admission to college. A holder of a scholarship must satisfy the entrance requirements of the college he or she desires to attend.

8. *Payment of scholarship.* Before payment is made, the registrar of each college or university, where students having state scholarships attend, shall certify to the Department on a special form for each student, at such time during the school year as the Department may request, that the student is enrolled in the institution for the current year and is in good standing.

The State Treasurer shall pay to each successful candidate the sum of $100 during the spring term of each of the four years that he regularly attends college and is in good standing.

Scholarship at the Colorado School of Mines

One scholarship at the Colorado School of Mines is awarded to Pennsylvania each year. The selection of the candidate for this scholarship is made by the regular State Scholarship Examination.

The candidate for the scholarship at the Colorado School of Mines must designate on his papers that he is a candidate for this scholar-

ship. This candidacy, however, does not necessarily remove him from competition for a State scholarship. In other words, a student may be a candidate for the Colorado scholarship at the Colorado School of Mines, but if he fails to secure that scholarship his paper may be included in the competition for the scholarship for his county or senatorial district. In all such cases, however, his papers must contain a definite statement that he wishes to be a candidate for the State scholarship in case he fails to secure the Colorado scholarship.

The principal should clearly designate on his list the names of pupils competing for this scholarship.

The following principles govern the award and the holding of the scholarship at the Colorado School of Mines:

1. Scholarships are awarded to graduates of four year secondary school courses of the current year who show marked proficiency in their studies and are recommended by the proper school official.

2. Applications with recommendations must be on file with the Registrar of the Colorado School of Mines on or before July 1, of the year of graduation.

3. A candidate must satisfy all requirements for admittance without condition.

4. All scholarships are awarded for a period of four years and exempt the holder from all tuition or labortory fees.

5. A scholarship will be terminated if the holder does not maintain a satisfactory standing or does not comply with the requirements of the faculty or the trustees.

6. If the holder of a scholarship leaves school permanently, his scholarship may not be assigned or transferred.

7. The holder of a scholarship may, with the consent of the President secured in advance, absent himself from school for a period of not more than one year and retain his scholarship.

8. The monetary value of scholarships to residents of Colorado is approximately $50.00 annually; to non-residents approximately $200.00 annually.

Fifteen units are required for entrance, of which ten are specified and five may be chosen from a list of electives.

A candidate desiring to compete for this scholarship should so specify on the date of the examination.

Specified Units

Essentials of Algebra	1	Unit
Advanced Algebra	½	"
Plane Geometry	1	"
Solid Geometry	½	"
English	3	"
History	2	"
Physics	1	"
Chemistry	1	"
Specified Units	10	
Elective Units	5	
Total units for entrance	15	

IV. ADMINISTRATION OF THE PROGRAM OF STUDIES

1. *A unit.* A unit shall consist of the satisfactory completion of the equivalent of 120 sixty-minute recitation hours of work requiring preparation outside of class. Work requiring no outside preparation shall be counted as ½ the unit value of work requiring outside preparation. Work to be given half credit ordinarily includes the following subjects: manual training, shop work of all kinds, drawing, music in class, physical training, typewriting, penmanship. Whether certain other work such as cooking, sewing, and bookkeeping is given full or half credit depends on the requirement of outside preparation of lessons.

Any arrangement of recitations for any length of school year can be reduced to its unit value on an arithmetical basis. For example: the arithmetical statement for forty-five minute recitations per week for a school year of forty weeks would be

$$\frac{4 \times 45 \times 40}{60} = 120$$

On this basis five forty minute recitations per week for a school year of thirty-six weeks would just come within the standard requirement for a unit.

2. *A count.* The term *count* has not been used because it represents widely varying standards. It is ordinarly understood to mean one recitation a day for a school year. The length of recitations and of years, however, has varied all the way from twenty-five minutes for twenty-eight weeks, to forty-five minutes for forty weeks. For this reason the statement that the high school course consists of a certain number of counts is indefinite.

3. *Graduation.* First grade schools should make sixteen units of work the basis for graduation. It is recommended that pupils be graduated from the school rather than from a particular course in the school. While there is no objection to the graduation of an exceptional pupil in less than four years, the school should always accept the burden of proof that the case is exceptional and that the pupil has fully met all graduation requirements.

Boards of directors in charge of first grade schools have full authority to increase the number of units required for graduation.

4. *Recitation periods.* Recitation periods should be not less than forty minutes and not more than sixty minutes in length, exclusive of the time required for passing to and from classes, except

where supervised study is in operation. Where supervised study is in operation, a combined period of sixty minutes should be counted as equivalent to a forty-five minute recitation period.

5. *The program of studies.* The program of studies includes all the subjects offered in a given school, without reference to any principle of organizing these subjects or courses into curriculums.

6. *A curriculum.* A curriculum is a group of subjects or courses systematically arranged for any pupil or for any clearly differentiated group of pupils. It extends through a number of years and leads to a certificate or diploma. Administratively a curriculum represents an arrangement of courses within which a pupil is directed in his choice of work leading to graduation.

7. *A course of study.* A course of study means the quantity, kind, and organization of subject matter in any given subject of instruction offered within a definite period of time; e. g., first year algebra, third year physics.

8. *A standard day for teachers.* The conditions under which teachers are conducting third grade high schools necessitate a larger number of periods per day and a much wider range of subjects than ought to be required of any teacher. Teachers and boards of education should be shown the serious limitations imposed upon these schools, and should be encouraged to send pupils, wherever possible, to larger organizations which enable work to be done under better conditions. For the present the maximum number of periods per day should be ten and, it is strongly recommended that wherever it is possible, a teacher's work in third grade schools be reduced to eight periods per day.

The limitations imposed by the necessary conditions of work in a second grade school are somewhat less serious than those imposed upon a third grade school. The second grade school, however, in a similar way suffers under a serious handicap. Teachers, boards of education, and communities should recognize that neither second nor third grade schools can possibly afford such satisfactory educational opportunities as larger organizations.

For the present the maximum number of daily periods assigned to a teacher in second grade schools should be seven, and, wherever it is possible, the number should be reduced to six per day.

The maximum number of daily periods assigned to a teacher in first grade schools should be six, and, wherever it is possible, the number should be reduced to five per day.

9. *The school program.* The program of studies and the curriculum of any school should be outlined with the following considerations in view:

1. School authorities, communities, and pupils should understand that the work of the school is the pupils' business, and that outside interests must not interfere with the demands of the school.

2. The school itself must assume a larger amount of responsibility for the preparation of the lessons.

In accordance with these considerations, the following recommendations are made:

1. That a materially lengthened school day be encouraged in which there shall be larger opportunity for preparation of lessons under the supervision of the teacher and for various kinds of student activities. In order to provide adequate time for these various purposes the school day should consist of at least eight periods in addition to the time devoted to assembly. Where supervised study is in operation the school day should consist of not less than six periods of at least sixty minutes each.

A two-session school day, or a school day lasting approximately from nine to three thirty or four o'clock, with a thirty or forty-five minute lunch, is essential to satisfactory school work.

2. Since excessive employment out of school seriously interferes with school work, it should be discouraged. Students who are obliged to work three hours per day or more should ordinarily not attempt to carry the full schedule of school work and should plan to spend more than four years in the completion of the course.

10. *Two fundamental principles.* The program of studies of a high school should observe the two following principles:

1. There must be in all curriculums a common core of required subjects which can be justified because they are an essential part of the education in citizenship of every adolescent and are necessary for the perpetuation of our democratic social order.

2. In addition to this core curriculum, which should be required of all pupils, each school should offer as wide a variety of subjects as possible in order to meet the varying needs of diverse groups of individuals.

11. *List of required studies.* The essentials under Principal 1 include the following:

English	3½ units
Social studies, including history	3½ units
Science	1 unit
Mathematics	1 unit
Health instruction	2 periods a week

12. *Exceptional cases.* It will sometimes happen that a pupil will be unable to take the full course in history and the social studies without interfering with his preparation for college, or the completion of his vocational course within the usual high school curriculum. In such cases pupils may be graduated with two and one-half units of this work. In all cases a course in American history should be included in the eleventh or the twelfth year.

13. *Health instruction.* Health instruction, including physical training, at least two periods a week should be required. In some vocational curriculums, which include a large amount of physical work, it may be wise to excuse pupils from some portions of the physical training of this course. Corrective exercises designed to overcome individual physical defects, should be available for all pupils needing such treatment.

14. *Science.* The special task of high school science is to help the pupil organize the facts and forces of his material world in a logical, usable fashion so that he may be increasingly able to use the knowledge and processes thus gained in a progressively effective adaptation if his living and thinking to the social, physical, and economic life about him. The high school courses in science should be such that a pupil, for example, who has not less than four years of science instruction—three years in the junior high school and not less than one in the senior high school—should show the result of his science work in such respects as the following:

> As a worthier member of his home because increasingly sensitive to household problems involving the health and comfort of all and also increasingly able and ready to propose and supply solutions of these problems.
>
> As a worthier member of the school and civic community because increasingly sensitive to such problems as sanitation and hygiene, first aid and accident prevention, and increasingly able and ready to cooperate in their solution.
>
> In a growing vigor of body and brain because increasingly sensitive and responsive to the laws of nature governing their development and use.
>
> In a greater appreciation and enjoyment of the wonders and beauties of nature because increasingly intelligent with reference to the significant facts and forces of nature.
>
> In a growing appreciation of the place of scientific research and procedure in the development of our industrial, commercial, and agricultural life because increasingly intelligent with reference to the scientific processes involved in the production and distribution of the products of farm and factory.

While only one year of science is required in the four-year high school, it is highly desirable that the majority of pupils have the advantage of from two to four years of science. Progressive thought in curriculum making and in curriculum guidance places strong emphasis upon the importance and value of the study of science in American high schools.

15. *Mathematics.* The unit of required mathematics may best be given in the ninth year, although conditions may in some cases justify placing it later in some curriculums. If the subject matter is algebra, it should be reorganized so as to exclude a considerable body of purely formal material now customarily included. General or composite mathematics has many advantages as the subject for

the ninth year course. If commercial pupils can arrange their programs so as to take general mathematics in the ninth year, it is highly desirable that they do so. Where this can not be done, commercial arithmetic may be the required unit for these pupils.

16. *Advanced mathematics and foreign language elective.* It is recommended that mathematics beyond the first year and all foreign language be elective. This should not be interpreted to mean that these subjects should be elective in all the curriculums of a given school. The larger schools will be likely to include at least an academic curriculum, a commercial curriculum, a home economics curriculum, and a practical arts curriculum. Each of these curriculums should, of course, include as requirements subjects belonging to its particular field.

In the smaller schools, especially in the second and third grade schools, which can afford only a single curriculum, the mathematics beyond the first year and all foreign language should be elective. Many of these schools will find it advantageous either to eliminate foreign language entirely or to permit pupils who particularly desire to do so, to carry it as a fifth subject. It is generally unwise for a school with fewer than five teachers to give instruction in a second foreign language.

17. *Practical and fine arts, and vocational education.* The term, *practical arts* includes industrial, household, and agricultural arts. It embraces that group of activities for both boys and girls found in curriculums of the elementary and high schools, which are sometimes referred to as practical because they involve manipulation of materials and development of a degree of power to do things with the hands. No definite vocational aim is present in such instruction. The main objectives are general education, information that will be valuable for guidance purposes, and an appreciation of values which will tend to develop wise consumers. Many secondary school curriculums of the academic type allow for electives in practical and fine arts subjects. Practical and fine arts work is begun in the elementary or junior high school grades before pupils are mature enough to enter upon vocational preparation. It may be considered as a forerunner of vocational education. Opportunity is also given under the headings of drawing and music to give short courses in these subjects for the development of appreciation. This type of work is usually taught in relatively large classes, meeting from once to three times a week. These courses should not be confused with the Fine Arts Courses listed as electives, which should usually be full unit courses.

Vocational education, on the other hand, is specific in its aim. Its instruction directly prepares producers for entrance into a gainful

occupation. More time is required for the development of manipulative skill. The demands of a vocational curriculum, therefore, necessarily place a limitation upon the quantity of purely academic work that can be accomplished.

18. *School credit for outside study of music.* Music is properly the first educational interest of many of our young people, and should be recognized as an integral part of their education. A pupil who wishes to continue music as a major educational interest should not be compelled to choose between leaving the high school, overburdening himself with both music and the regular high school work, or dropping music. Until provision is made in our public schools for instruction in music as an educational unit of equal value with other subjects, justice to these pupils requires that they at least be given school credit for properly supervised work done at their own expense with private teachers. To this end the Department has outlined a plan for proper accrediting of music for pupils who wish to present music as an integral part of their individual curriculums. In the program of studies this type of music is listed under the fine arts courses. These courses should usually be sufficiently exacting to receive credit of one unit each per year.

The details of this plan as well as of courses to be given in the high school will be included in the music syllabus.

19. *List of subjects.* The program of studies from which the curriculums of any senior or four-year high school should be made up will include a wide range of subjects. The following list is suggestive. Schools which desire to teach subjects not included in this list should communicate with the Department of Public Instruction.

First Year	*Second Year*
Required	*Required*
English	English
Civics	European History
Health Instruction	Health Instruction
Elective (2)	*Elective (2)*
Algebra	Mathematics (Plane Geometry)
General Mathematics	Biology
Commercial Arithmetic	General Science
General Science	Foreign Language
Foreign Language	Commercial and Economic Geography
Etymology	Typewriting
Junior Business Training, etc.	Shorthand
Drawing	Bookkeeping
Music	Drawing
Practical Arts Courses:	Music
Agricultural	Practical Arts Courses:

Elective (2)

Home Economics
Industrial
Fine Arts Courses:
Art
Music

Elective (2)

Agricultural
Home Economics
Industrial
Fine Arts Courses:
Art
Music

Third Year

Required

English
American History or Europ. Hist.II
Health Instruction

Fourth Year

Required

English 1 or ½
Problems of Democracy 1 or ½
American History (if not given the third year)
Health Instruction

Elective (2)

Mathematics (Sol. Geom., Adv. Alg., Trig.)
Physics or Chemistry
Foreign Language
Bookkeeping
Typewriting
Stenography
Business Organization
Retail Selling
Commercial and Economic Geography
Drawing
Music
Practical Arts Courses:
Agricultural
Home Economics
Industrial
Fine Arts Courses:
Art
Music

Elective (2)

Mathematics (Solid Geom. ½, Trig. ½, Advanced Alg.)
Physics or Chemistry
Physical Geography
Economics
Sociology
Studies in English or American Literature (not History of Literature)
Stenography
Typewriting
Elementary Accounting
Advertising and Salesmanship
Office Practice
Commercial Law
Bookkeeping
Drawing
Music
Practical Arts Courses:
Agricultural
Home Economics
Industrial
Fine Arts Courses:
Art
Music

20. *The curriculum of the individual school.* The general provisions of the program of studies set forth above are designed to safeguard the fundamental purposes of the high school as an institution for the training of citizens of a democracy. To that end, certain prescribed subjects in the lines of English, the social studies, and health are made the common basis of all curriculums. In addition, a wide range of subjects is suggested from which curriculums of schools should be formulated.

The first problem of a school in organizing its curriculums is that of the largest service to the young people of the community. How wide the range of offerings is to be will obviously depend on the size of the school and the resources of the community. From five general lines suggested under the heading, "Essentials of Secondary School Opportunities", should be made such curriculums as will render the largest service to the greatest number of pupils. Frequently, several of the type curriculums given in this chapter, or appropriate modifications of these curriculums, can be offered. Mere tradition should not be permitted too large an influence in the decision of what subjects are to be included in the program of the school. For example, the high school in a community from which few students go to college should not stress foreign languages, nor should courses in bookkeeping, stenography, and typewriting be offered in communities where there is no demand for bookkeepers and stenographers. School officers, superintendents, principals, and teachers should carefully survey the educational needs and resources of their communities and endeavor to adjust the high school course to meet these needs.

21. *Shall a pupil take four or five major subjects?* The curriculums of this manual are based on the assumption that a normal pupil shall have twenty recitation periods per week in the major subjects. This is in harmony with the best general practice of the country. It leaves the daily schedule sufficiently free to permit the pupil to add five periods a week in subjects that do not require home preparation such as physical training, drawing, and music, and thus provides a sufficiently heavy roster for the ordinary pupil. Many of the smaller schools, however, are at present requiring pupils to take five major subjects, each five times a week, thus making it impossible for them to get any drawing or music and often seriously limiting the physical training. The general trend of educational theory is not in harmony with this practice.

It is possible to organize a program so as to include five major subjects and at the same time provide for the desirable unprepared work. Classes in the major subjects should in such cases meet only four times a week. The requirement of 120 sixty-minute hours for a unit can be met under this system with forty-five minute periods for a school year of forty weeks, which is rapidly becoming the minimum standard in the states having the best educational systems.

The great advantage of this system is that it permits considerably greater flexibility in the pupils' curriculums. Twenty periods of prepared work are not too much for a normal boy or girl, and the inclusion of an extra subject each year gives a broader curriculum, which opens new fields of interest and enriches the pupil's acquaintance with our complex civilization.

22. *Typical curriculums.* The following curriculums are given merely as suggestive types. They are not to be understood as prescriptions. The most highly specialized curriculums have not been included. Principals are invited to make such adaptations of the general plan as will best suit their communities and to consult freely with the Department of Public Instruction.

The attention of principals is called to Resolution 7 of the Educational Congress, which has received the endorsement of large groups of secondary school men of the State: "Resolved, That courses of study (curriculums) be organized with a view to the largest service to all students, ninety per cent of whom do not go to college. That the colleges be urged to coöperate with the high schools by giving an opportunity for higher education to those whom high school principals recommend as qualified to profit by college courses".

The type curriculums given below are made on the basis of four prepared subjects as the standard requirements. If four-period units are the standard for the school, pupils will take an additional subject. In addition it is expected that each pupil will have, as a rule, one period a day of unprepared work. This should include drawing, music, and physical training. Credit should be given towards graduation on the basis of the definition of the term, *unit,* on page 25.

In the curriculum designated as *Academic 1*, provision is made for five prepared subjects in the last two years. This curriculum was formulated in a conference with a committee of the College Presidents' Association and is designed specifically for students desiring to present two foreign languages for college entrance. These pupils are likely to be among those of superior ability, and such pupils are frequently able to carry an extra subject without undue strain.

ACADEMIC I

First Year		*Second Year*	
	Units		*Units*
English	**1***	English	1
Civics	½	European History	1
European Hist.	½	Plane Geometry	1
Algebra	**1**	Latin	1
Latin	**1**	Health Instruction	Partial
Health Instruction	Partial	Drawing	Partial
Drawing	Partial	Music	Partial
Music	**Partial**		

*Major courses except in laboratory science may be either four or five periods a week as suggested in the topic, "Shall a pupil take four or five major subjects", page 32 above. If four hour units are given, a pupil should ordinarily take five major subjects.

Third Year

English	1
American History	1
Biology, Chemisty, orPhysics	1
Latin	1
Second Foreign Language	1
Health Instruction	Partial

Fourth Year

English	1
Latin	1
Second Foreign Language	1
Physics, Chemistry, or Mathematics	1
Health Instruction	Partial
One elective	1

ACADEMIC II

First Year

English	1
Civics	1
General Science	1
General Mathematics or Algebra	1
Health Instruction	Partial
Drawing	Partial
Music	Partial

Second Year

English	1
European History	1
Plane Geometry	1
Foreign Language	1
Health Instruction	Partial
Drawing	Partial
Music	Partial

Third Year

English	1
American History	1
Physics	1
Foreign Language	1
Health Instruction	Partial
Practical or Fine Arts	½ or 1

Fourth Year

English	1
Problems of Democracy	1
Chemistry	1
Foreign Language	1
Health Instruction	Partial
Practical or Fine arts	½ or 1

GENERAL

First Year

	Units
English	1
Civics	1
General Mathematics	1
General Science	1
Health Instruction	Partial
Drawing	Partial
Music	Partial

Second Year

	Units
English	1
European History	1
Biology	1
Health Instruction	Partial
Drawing	Partial
Music	Partial
Choose one:	
Practical Arts Courses:	
Agricultural, Home Economics, Industrial	½ to 2
Fine Arts Courses:	
Art, Music	½ or 1

Third Year

English	1
European History	1
Health Instruction	Partial
Drawing	Partial

Fourth Year

English	1
Problems of Democracy	1
Health Instruction	Partial
Drawing	Partial

Third Year		*Fourth Year*	
Music	Partial	Music	Partial
Choose two:	2	*Choose two:*	
Commercial and Econ. Geography	1	Commercial Subjects	1 to 2
Commercial Subjects	1 or 2	Chemistry	1
Physics	1	Agricultural, Home Economics, Industrial	½ to 2
Practical Arts Courses: Agricultural, Home Economics, Industrial	½ to 2	Practical Arts Courses:	
Fine Arts Courses:		Fine Arts Courses:	
Art, Music	½ or 1	Art, Music	½ or 1

23. *A program of studies.* A more flexible plan for presenting curriculums is the arrangement of the entire offering of the school on some such plan as is given on pages 37-38. This method of publication affords great flexibility and challenges pupils and parents to give careful thought to the selection of studies. It requires the principal and teachers to give more attention to the problem of guidance so as to prevent pupils taking the line of least resistance and to insure proper consideration of the abilities and needs of individual pupils. In addition to the majors of three and one-half units each in English and the social studies required by the State program, either two minors of two units each or a major of at least three units and minor are recommended.

24. *Curriculum guidance.* From the beginning of his high school course, a pupil should have clearly in mind a general high school aim—vocational education, general education, or college preparation. To meet these aims the high school program of studies as shown herewith, presents five groups of courses—a required group and four curriculum groups. The course in vocational civics should render valuable assistance in educational and vocational choices.

In planning his individual program of studies a pupil upon entering high school should first decide which of the four curriculum groups—Academic, Commercial, Practical Arts, or Vocational—will help him best to realize his high school aim. A subject group so chosen becomes his major group.

Having thus chosen his major subject group, a pupil entering high school should explicitly plan his entire four-year high school program, not with the thought that the program thus laid out becomes fixed and unchangeable. In fact, such a program usually will undergo revision each year to accord with changes and development in the pupil's high school aim, but a general plan, even though only a tentative one, should always govern the choice of subjects for each year, so that a pupil will be conscious of a definite purpose running

through his high school program from beginning to end. Such a four-year individual program of study may be laid out in the following manner:

I. Four or five subjects in addition to health instruction two periods a week, drawing two, and music one, constitute a standard program (Four subjects of five hours each, or five subjects four hours each).

II. The subjects of the "Required Group" should first be listed for each year.

III. The required (capitalized) subjects of the major curriculum group (Academic, Commercial, Practical or Fine Arts, or Vocational) should next be listed for each of the four years.

IV. The remaining subjects should be chosen with the advice and approval of the home-room teacher and the guidance counselor of the school. The following general suggestions will help:

1. If the pupil expects to attend college and has a specific college in mind, the requirements of this particular college should be provided for in the pupil's program; otherwise general college entrance requirements should be included. The major portion of a pupil's subjects will in such a case be selected from the Academic Group. However, all academic pupils will profit greatly by election of some subjects from the Practical Arts Group that will provide opportunity for development of avocational interests and of special aptitudes, particularly in applied art or music.

2. Commercial pupils will note that the work of the first year is all required.

Shorthand in the second year should be regarded as an elective. Only those who hope to continue it should begin it at this time.

For the third and fourth years pupils should choose subjects that will prepare for one of the following definite objectives: stenographic work, general business and accounting work, or retail selling. For details regarding these three groups of subjects see more complete statement in the Commercial Education Syllabus.

3. Vocational pupils other than those in the commercial group will find in the Vocational Education Bulletins detailed suggestions for filling out the remaining subjects of their four-year program.

Having thus laid out his school program, even though only tentatively, a pupil will make more intelligently, under proper guidance, the necessary revisions from year to year, and will pursue his high school work with greater zest and purposefulness, than would be the case if he made his selection of studies from year to year without reference to the remainder of his high school work. High school principals will find it profitable to have such a general program of high school studies as shown herewith and as may be adopted by the school boards of their respective districts printed on a large sheet (say 16″ x 24″) for display and study in elementary schools. Principals or other representatives of the high school should visit such schools shortly before promotion time from the eighth grade, to explain to pupils and teachers and parents the values and possibilities of high school education. For further details and suggestions on curriculum guidance, see Chapter VII of this manual.

Grades	First Year	Units	Second Year	Units	Third Year	Units	Fourth Year	Units	Directions
I Required Group	ENGLISH CIVICS HEALTH	1 1 1	ENGLISH HISTORY HEALTH	1 1 ½	ENGLISH HISTORY, AMER. HEALTH	1 1 ½	ENGLISH PROB. OF DEM. HEALTH	½-1 ½-1 ½	Required of all pupils
II Academic Group	*MATHEMATICS Latin Science	1 1 1	MATHEMATICS Latin Mod. Language Science	1 1 1 1	Mathematics Latin Mod. Language Science	1 1 1 1	Mathematics Latin Mod. Language Science	1 1 1 1	One year of science above first year should be required. Elective subjects may be chosen from groups II, III, or IV, to meet pupils' special needs.
III Commercial Group	SCIENCE BUS. MATHEMATICS } JR. BUS. TRAINING } BUSINESS WRITING } TYPEWRITING	1 2 ½	BOOKKEEPING Shorthand Typewriting or Com. & Econ. Geography Com. & Econ. Geography	1 1½ 1 1	Shorthand Typewriting Bookkeeping Office Practice Bus. Organization Retail Selling	1 ½ 1 ½ 1 1	Shorthand Business Econ. Commercial Law Office Practice Adv. & Sales. Bookkeeping Retail Selling	1 1 1 1 1 1 1	For detailed suggestions regarding choice of desirable electives, see pages 35 and 77.
IV Practical and Fine Arts Group	MATHEMATICS SCIENCE Agriculture I Home Economics Mechanical Draw. Shop Work Art Music	1 1 1 1 1 1 1 1	Bookkeeping Econ. Geography Agriculture I Home Economics Mechanical Draw. Shop Work Art Music	1 1 1 1 1 1 1 1	PHYSICS or CHEMISTRY Home Economics Mechanical Draw. Shop Work Art Music	1 1 1 1 1 1	Chemistry or Physics Home Economics Mechanical Draw. Shop Work Art Music	1 1 1 1 1 1	For detailed suggestions regarding choice of desirable electives, see pages 35 and 77.
V Vocational Groups	Agriculture Home Economics Industry		See Vocational Agricultural Curriculum p 132. " " Home Economics " p 138. " " Industrial " p 128						

*CAPITALIZED subjects indicate additional curriculum requirements.

Practically the same material as that shown on pages 33-34 is presented in the following tabulation, which is similar to the traditional arrangement of the curriculum. This arrangement is recommended for the smaller high schools in preference to the presentation of the offerings of the school in two or more closely defined curriculums.

First Year

	Units
English	1
Civics	1
Mathematics	1
General Science	1
Health Instruction	Partial
Music	Partial
Drawing	Partial
Choose One:	
Latin or Modern Foreign Lang.	1
Etymology	1
Practical Arts Courses:	
Agricultural, Home Economics, Industrial	½ to 2
Fine Arts Courses:	
Art, Music	½ or 1
Junior Business Training	1

Second Year

	Units
English	1
European History	1
Health Instruction	Partial
Choose Three:	
Latin	1
Modern Foreign Language	1
Biology	1
Plane Geometry	1
Practical Arts Courses:	
Agricultural, Home Economics, Industrial	½ to 2
Fine Arts Courses:	
Art, Music	½ or 1
Bookkeeping	1

Third Year

English	1
American History	1
Health Instruction	Partial
Choose Three:	
Latin	1
Modern Foreign Language	1
Mathematics	1
Physics	1
Practical Arts Courses:	
Agricultural, Home Economics, Industrial	½ to 2
Fine Arts Courses:	
Art, Music	½ or 1

Fourth Year

English	1
Problems of Democracy	1
Health Instruction	Partial
Choose Three:	
Latin	1
Modern Foreign Language	1
Mathematics	1
Chemistry	1
Practical Arts Courses:	
Agricultural, Home Economics, Industrial	½ to 2
Fine Arts Courses:	
Art, Music	½ to 1

25. *Rotation of recitation periods.* A rotation of recitation periods that permits the advantages or disadvantages attending some periods of the school day to be shared by all subjects alike, has proved successful at many high schools.

The chart below illustrates the rotation of classes in a high school with seven daily recitation periods. *A* designates the classes scheduled for the first period on Monday, *B* those for the second, *C* those for the third, etc.

Since some classes, such as those in physics, chemistry, etc., require two consecutive periods, it is advisable to rotate the recitation periods by groups of two as far as possible; *A* being grouped with *B*, *C* with *D*, and *E* with *F*. *G*, standing by itself, can be used for the activities period of the school. An eight-period day can be provided by adding another period so as to make a fourth two-period group.

On Monday the classes will recite in alphabetical order, beginning with the *A* period. On Tuesday the *G* classes of Monday are shifted into the first period of the day, and the remaining classes are advanced one period. On Wednesday the group *E* and *F* comes first, and the other classes recite two periods later. On Thursday the group *C* and *D* is put into first place, and the remaining classes are advanced two periods. On Friday group *E* and *F* is placed first, *F* preceding *E*; group *A* and *B* and group *C* and *D* follow in order; *G* comes last. In this way a more equitable distribution of the advantages and disadvantages of the various periods is secured.

SCHEDULE OF RECITATION PERIODS

Recitation Periods	*Monday*	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
First	A	G	E	C	E
Second	B	A	F	D	F
Third	C	B	G	E	A
Fourth	D	C	A	F	B
Fifth	E	D	B	G	C
Sixth	F	E	C	A	D
Seventh	G	F	D	B	G

By lengthening the last period or two of each day, that is, the sixth and seventh, principals can use the device, moreover, as a means of providing opportunities for supervised or directed study. At least five different groups of classes are thus afforded such an opportunity each week.

This schedule can be readily adapted to a school in which any part of the subjects may be run on a four period basis by dropping out one of the days for any one of the units. For example, suppose English, mathematics, and Latin are four-period classes, and stenography and typewriting five period classes, the English in *A* will recite Monday, Tuesday, Wednesday, and Friday; the mathematics in *B*, Monday, Wednesday, Thursday, and Friday; the Latin in *C*, Tuesday, Wednesday, Thursday, and Friday. The stenography can recite either for the full five days in one of these units or for the full five periods of any other unit.

Principals who desire to study in greater detail the making of a high school roster are referred to *Making a High School Program* by M. W. Richardson, published by The World Book Company, Yonkers-on-the-Hudson.

Generally accepted principles and practices.

Following is a summary of principles and practices of secondary education that are generally accepted.

1. *Duties and responsibilities of the board of school directors.* The School Code places upon the board of directors of a district full responsibility for the employment and dismissal of teachers, superintendents, and other officers and employees; the adoption of textbooks; the purchase of school sites; the repair and erection of school buildings; the extension of the school term beyond the compulsory period; the expansion of courses of study beyond the minimum courses; the enforcement of attendance and other laws regulating the schools; the levy, assessment, and collection of taxes; the determination of the types of schools, and such other duties as the law provides for the "maintenance and support of a thorough and efficient system of public schools" as required by the constitution.

In discharging these duties, it is more and more being recognized that superintendents and principals should be looked to for advice. The training of principals and superintendents is coming to include more than the matters that have been considered purely professional, such as the selection of teachers, choice of textbooks, and the organization of programs of study, curriculums, and courses of instruction. School men everywhere are giving careful study to questions of finance, school buildings and grounds including their proper care and supervision, the purchase and distribution of supplies, and all other administrative problems. Proper unification of a school system requires the extension of the influence and the responsibility of the chief professional officer of the district. A board of directors should employ as its chief educational officer only one whose judgment they can feel safe in following on such important matters.

The organization, discipline, and supervision of instruction are generally recognized to be the particular province of the superintendent and principal. Boards of directors should in these matters confine themselves to their unquestioned right to legislate on general policies and to pass judgment on the success with which their policies are enforced by their professional employees.

2. *Preparation of teachers.* It is generally agreed that the education represented by a college course or its equivalent is highly desirable for a teacher in a high school. While the standards of the State of Pennsylvania do not require this preparation at present,

it should be recognized that in this respect the State is considerably lower in its requirements than most of the states having the best educational standing. Local boards of education have full authority to prescribe additional requirements. There is strong probability that there will be an increasing insistence upon college graduation or its equivalent as preparation for teaching positions in high schools.

3. *The one-teacher school.* The one-teacher school should offer not more than a single curriculum involving a maximum of eight, or at the very utmost ten, regular recitation periods per day. Such schools must confine themselves to the two years' work provided by law unless they have permission from the Deparment of Public Instruction for an added year on the alternating plan. It is generally unwise for such schools to attempt to teach a foreign language.

4. *Foreign language in small schools.* Schools having six teachers or fewer should confine themselves to a single foreign language. Latin is likely to be the most valuable language for such schools. Schools having two teachers should give not more than two years of foreign language.

5. *A single curriculum in a small school.* Schools having from two to five teachers should so correlate their offerings as to form a single curriculum with various electives to provide for individual needs. Such schools should avoid organizing classes for relatively few pupils.

6. *Classification of pupils from other high schools.* A school receiving a pupil from another high school must satisfy itself as to the ability of the pupil to do its work and to meet its standards in a satisfactory manner. It should at the same time exercise this authority in a spirit of service rather than one of arbitrary exaction. A real problem is encountered in the first grade schools that receive pupils from second and third grade schools, where the conditions are generally less favorable. It frequently happens that pupils who have spent two or three years in the smaller schools demonstrate a higher grade of ability after admission to the larger school than an entrance examination would indicate. A safe rule for continuous work in such cases is to credit previous work in the subject on the satisfactory completion of advanced work. Thus a pupil who does good work in third year Latin or mathematics may safely be credited with the work of the first two years in those subjects. It is generally safe to credit all work of pupils showing a high grade of ability after a reasonable probationary period.

7. *Basis for organizing classes.* Classes should be organized upon the basis of the greatest good to the largest number. Classes should not be formed for the benefit of a very few pupils. It is un-

fair to the rest of the pupils in a school to overburden a teacher for the sake of providing work that is otherwise desirable but which is available to only a small number of pupils.

8. *Variety of offerings in larger schools.* Schools having ten or more teachers should provide all of the types of instruction and training described under the heading, "Essentials of Secondary School Opportunities", except in cities, where agricultural instruction is not demanded. The larger the school, the more varied are the types of practical arts instruction that should be provided.

9. *Deficiencies in the fundamental subjects.* Many pupils on entering high school are found to be deficient in arithmetic, penmanship, spelling, or language. Where these deficiencies are marked, drill should be provided to overcome the weakness. No pupil should be graduated from high school whose arithmetic, spelling, penmanship, or language is noticeably weak. No credit should be given for such drill work. Pupils thus deficient in the fundamental processes on entering high school may reasonably be expected to spend more than four years in the school.

10. *Music for all pupils.* In general, the instruction in music will be in the form of chorus singing. This should find a place in every school. Wherever possible, organized courses should be offered for which academic credit should be given. It is particularly desirable that a school have an orchestra. Such an organization is of great value both for the school and for the individual participants. Valuable suggestions for such an organization are given in the syllabus in music.

11. *Organization for succeeding term.* The organization of the school for the succeeding term should be completed before the close of any given term. It is particularly important that the organization for the fall term should be completed before the close of the spring term. Delay in beginning the actual work invites tardy return of pupils and tends to demoralize the school.

This organization should include:

1. A roster or daily program showing the time and place of all classes.
2. A copy of the roster showing the assignments to each teacher
3. An individual assignment card for each teacher.
4. An individual roster card, showing the daily program for each pupil. This card should be made in duplicate, one for the office and one officially stamped for the pupil, which shall serve as an admission card to his several classes.
5. A list of courses that could be taught by each teacher in case of emergency requiring readjustment of the roster of the school.

6. A list of all books and supplies needed at the beginning of the new term.

7. A record of books or supplies retained by teachers or pupils for use during vacation.

8. A complete record of the work of every pupil for the preceding term.

In a small or medium-sized school, this material should be placed in the hands of the superintendent or the secretary of the board of directors before the close of the spring term.

12. *A marking system.* The marking system of the school should be based on a scale using letters rather than figures. It is not possible to give ratings in which are recorded discriminations as minute as are indicated, for example, by 69 and 70 per cent. The rating scale should indicate three or four degrees of excellence in passing marks and one failing mark.

Pupils' scholarship records should not be lowered as a punishment for misconduct.

The rating given a pupil at the end of the term should represent the teacher's estimate of the pupil's mastery of the subject, and if the subject is a continuous one, of his ability to do the work of the succeeding term. In rating pupils the quality of daily recitations, of short unannounced tests, of written papers, and of final examinations, if any are given, should all receive consideration. The consensus of opinion of the best authorities is that too minute daily marking and a reliance upon any mathematical averages is wasteful of time and misleading from the standpoint of the aims of instruction.

In general, the distribution of the number of pupils receiving the various ratings of the scale should be fairly constant. Given the ratings A, B, C, D, E, in descending series with E denoting failure, the distribution of the class would generally be something like the following: A—5 to 10%; B—20 to 25%; C—50%; D—20 to 25%; E—3 to 10%. Most authorities agree that if the course is well planned and the instruction efficient, the percentage of failures should be considerably below 10%.

13. *Homogeneous classification of pupils.* The boys and girls who are enrolled in our high schools show marked individual differences. Some have better health and more physical energy and vitality than others. Some come from homes where the value of school work is appreciated, and have parents who encourage them to make their best effort in this work, while in other cases home influences actually handicap pupils in their educational as well as moral development. Some pupils come to high school with records of elementary school work that are excellent. Others have records that

are far from satisfactory. Marked differences in mental qualities are always present; not only differences in general intelligence and ability to do school work, but also in special kinds of ability and in temperament and disposition.

In recent years mental tests have been developed rapidly. They make it possible to measure some of these differences in the boys and girls in our high schools. There are group tests which may be given to a number of pupils at once, much as we give examinations in arithmetic or history, and individual tests for more intensive work with single pupils. The majority of the mental tests available measure more or less accurately the general intelligence, or all-round ability of the pupils tested. These tests have three principal functions in high school work as follows:

1. For surveys
2. For classification of pupils
3. For study of individuals

These mental tests may be used as part of a survey. A principal may wish to compare the work of his school with that of other high schools, or that of one class with another, or the results of one teacher's work with another's. Unless he has some measure of the general ability or intelligence of the pupils in the two schools or classes he can not properly make comparisons in regard to the work they are doing. For statistical work of this kind the group tests will be used, and little attention will be given to the scores of individual pupils.

Schools have been classifying their pupils by the slow and discouraging process of non-promotion. Pupils who fail to be promoted are usually required to repeat the work of the previous term. We, therefore, find older and duller boys and girls in classes with younger and brighter children. It is becoming possible to classify these pupils much more intelligently and far less wastefully by the use of mental tests. In larger schools sections can be organized on a basis of homogeneous grouping according to ability in a specific subject. Thus seventy-five pupils in second year English would be divided into three groups according to ability rather than according to an alphabetic arrangement of names. In this way the school work required of the several groups can be adapted to their different abilities. The pupils of the brighter group need not fall into careless habits of study, while those of the duller group do not become discouraged by having to repeat work which they have had before. Even where classes are small, division is desirable wherever it can be made without unduly increasing the number of class sections. This classification makes possible adjustment of content, method of teaching, and rate of progress to group capacities and prevents wasteful repeating. In smaller schools where it is not feasible to

divide pupils into separate classes according to abilities, the teacher nevertheless will find it of marked advantage to have, say, a threefold grouping of the pupils in a single class that will make possible some adaptation of the materials and methods of instruction to the varying abilities of the pupils.

Any classification of pupils should be reconsidered frequently, and any pupil should be transferred from one group to another without waiting for regular promotion periods as soon as it appears that he can find better educational opportunities elsewhere.

No study of individual pupils is complete that does not take into account some of these measures of mental qualities. Group test results have some significance. Results of individual tests, like the Binet Simon scale, have still more. Still more dependence may be placed on the findings of a person trained in clinical psychology who will use a number of different individual tests in this mental analysis and will also take into account other facts in regard to the pupil, his physical condition, home surroundings, etc.

14. *Interpretation of tests.* Principals and teachers should be careful not to overestimate the significance of a single pupil's score in a group test.

Generally speaking, high scores are significant of superior natural ability. Scores below average may be due to a number of causes. In any case other data must be considered in interpreting these results and in the educational guidance of the pupil. Among these data are the reports of the medical examiner and the visiting teacher. The pupil's previous school history should be considered. The coöperation of parents should be secured. Test scores, whether in group tests or in individual examinations, should never be the only basis of judgment.

Still less should those without training in clinical psychology give out statements in regard to mental deficiency. Much harm can be done in this way. The problem of the school is a practical one. What is the best use that can be made of the time a given pupil will spend in school is the primary question. It can be answered satisfactorily only by making use of all the information available in each case.

Principals should frankly recognize that the use of mental tests in high school administration is in an experimental stage. Doubtless both the high school and the college will make an increasing use of tests as a basis for curriculum and vocational guidance and for the progressive modification of curriculums and courses of study. The Department of Public Instruction will welcome reports on uses of tests and will render assistance in experiments wherever possible.

15. *The delegation of administrative duties.* Proper administration of a school makes it necessary for the principal to delegate many executive duties and responsibilities to clerical assistants and

teachers. In a larger school, an assistant principal or executive secretary is necessary in order that the principal may be so relieved of petty details as to become a real leader in the educational and social life of the school. This delegation of responsibilities can be best effected by a clear definition of a function and by the delegation of full responsibility for it to the member of the staff best qualified to meet the responsibility. After such responsibility has been delegated, the principal should keep in touch with the function through his appointee and should make any desirable changes in its management through the appointee rather than by direct personal interference.

This plan of organization insures continuity to these functions in case of the principal's absence, and leaves him free to devise policies and plans for the growth of the school. It is becoming generally recognized that a well-organized school should be able to run successfully during any necessary absence of its principal.

Schools will vary greatly in the functions delegated to individual teachers or committees. Among the functions that may profitably be so delegated in a large school are some or all of the following:

Guidance program of the school
Supervision of preparation for college and normal schools
Making of roster
Management of library
Management of senior class affairs
Management of commencement exercises
Management of lunch room
Management of boys' athletics
Management of girls' athletics
Management of school paper
Management of lecture and entertainment course
Management of student participation in school government
Special attention to first-year pupils
Social activities of faculty
Professional activities of faculty

16. *Physical examinations.* Every pupil should have a thorough physical examination at least once a year. A permanent record of this examination should be kept. Corrective exercises should be given in the school gymnasium in cases needing such treatment.

17. *The standard requirement for pupils.* A pupil of normal ability should be required to carry approximately twenty periods of recitations requiring preparation outside of class or in a supervised study period, and approximately five periods of work requiring no outside preparation. The prepared work may be made up of five subjects with four recitations per week, or four subjects with five recitation periods per week. In either case, the time spent in recitation for a year should be not less than 120 sixty-minute hours.

18. *Teaching how to study.* Some of the time of the recitations in each subject should be devoted to instruction in the best methods of study. Experiments with supervised study should be encouraged.

19. *Foreign languages.* Pupils should not be permitted to begin more than one foreign language in any year. Pupils who take a foreign language should study it at least two years unless it becomes evident that they can not profit by the study of any foreign language. Pupils should not be permitted to drop one language for the purpose of taking another without excellent reasons. The larger schools should offer four years' work in Latin and in each of one, two, or three modern languages. Only in exceptional cases should any pupil take more than one foreign language. More than four units of foreign language throw a pupil's curriculum out of proportion as badly as a similar over-emphasis on science, mathematics, or social studies.

20. *Flexibility of administration.* Inasmuch as the high school is recognized as a place of testing as well as of training, its program of studies should be administered with great flexibility. Curriculums are schematic organizations of the various units of subject matter, each leading to a definite goal. A pupil should not, however, be held to the continued pursuit of a curriculum he has chosen if there is a clear indication that he has made an unwise choice. Through the guidance program of the school, the principal should encourage changes of the curriculum which seem likely to afford better service to individual pupils.

21. *Honest work should be required.* The desirability of adapting the school to the needs of individuals should never be accepted as an excuse for a lack of effort on the part of pupils or for an aimless shifting from subject to subject merely to get out of work. Habits of laziness and evasion may come either from forced continuance at subjects which pupils believe to be useless to them or from failure of the school to insist on thorough work. Nothing is more needed in secondary education today than a determined concentration upon the requirement that all pupils make an honest and sustained effort at some worthwhile educational task. There is good reason to believe that a pupil who refuses to make such an honest effort in the high school will be better served in both instruction and discipline by the stern necessity of self support. Teachers and parents should frankly face the individual problems of this kind that arise in every school and should coöperate in setting up conditions that will promote the formation of right habits and sound character.

The tendency to permit to adolescents too great freedom in the use of automobiles, too frequent and expensive dances and parties, too much spending money, and unprecedented extravagance in dress is

a serious menace to the work of the school and to the formation of right habits by the pupils. The high school is a representative institution of democracy, and as such it may easily be tempted to condone practices sanctioned by the groups it serves. It is clearly the duty of boards of education, superintendents, principals, and teachers to use all of their personal and professional influence and authority to secure that earnestness of effort which will develop right habits and incidentally reduce the great evil of high school failures. If citizens and school officials will unite in correcting these excesses that appeal so strongly to high school boys and girls, the service of the school will be enhanced and the interests of the young people safeguarded.

22. *Scholarship honors.* The practice of awarding the honor of salutatorian and valedictorian on a basis of class standing during the course is open to various objections. As noted in No. 12, the numerical rating should be abandoned. This will make the award of such honors extremely difficult. The award of these honors is almost inevitably unfair, because the standards of marking vary with different teachers and different subjects, and competition for these honors may tempt pupils to shape their curriculums with a view to honors rather than to the greatest benefit they may receive. Competition for honors, moreover, appeals to an undesirable motive and promotes unsocial attitudes on the part of the pupils.

As a substitute for the valedictory and salutatory honors, a school may establish an honor group to contain every pupil who obtains A or B in at least twelve units of work. This plan will lead to the substitution of a spirit of emulation and friendly and helpful coöperation instead of one of antagonistic competition.

The National Association of High School Principals has devised an honor system for high schools that the Department of Public Instruction heartily recommends to the schools of the State which are anxious to include such a system.

23. *Finances of school activities.* Special care must be exercised in handling the funds incident to the various activities of school publications, entertainments, athletics, etc. A member of the faculty, delegated to this responsibility, should have custody of all funds, and should make regular and frequent report concerning them to the faculty and the student body. Expenditure of funds raised through pupil activities should be initiated in the pupil council, and be subject to the veto of the principal.

24. *The high school building and grounds.* The Bureau of School Buildings of the Department of Public Instruction will gladly

advise boards of directors who are contemplating the erection or remodeling of buildings.

A few points that should receive particularly careful consideration in planning for new buildings are:

1. *Location.* Generally speaking, it is better to locate a high school building outside the built-up center of a community. A walk of a mile or even more is not injurious to high school pupils. It is particularly important that the building be removed from the noise of trains and trolleys.

2 *Ample grounds.* If the high school is to be the center of the recreational life of the boys and girls of a community, it must have ample space for football and baseball fields, tennis courts, and track. The provision of several acres of ground in the immediate vicinity of the school is highly desirable wherever possible. It is economical also to provide room for additions to the building.

3. *Essential features.* In addition to the usual offices, classrooms and science laboratories, every high school building should include an auditorium as large as can be afforded, a library to accommodate at least ten per cent of the maximum capacity of the school, suitable rooms for instruction in commercial subjects, shops for the practical and industrial arts, cooking and sewing laboratories, a lunch room, a gymnasium, a swimming-pool, and if possible a suite of rooms for use as a model house keeping apartment.

25. *The high school library.* Every high school should have a library properly catalogued and freely used for reference. Provision should be made to supply the library from time to time with books that are needed in the various subjects, and for instructing pupils in their use. All library assignments should be definite. The adequacy of the library and the use that is made of it will be a strong factor in determining the classification of the schools.

A minimum of five recitation periods a year should be given to graded instruction in the use of reference books, indexes, decimal classification and dictionary cataloging. It should be given by the school librarian if there is one, and should be a distinct requirement for graduation. This instruction should be given to class groups in the various subjects. An outline of such courses is given in the School Library Manual.

Junior high schools. There should be a general library of at least 300 volumes selected with reference to the age and needs of junior high school pupils. At least 100 of these should be bought each year.

Third grade high schools. There should be a general library of not less than 400 volumes for pupils of high school age. At least 100 of these should be bought each year.

Second grade high schools. There should be a general library of not less than 500 volumes for pupils of high school age. At least 125 of these should be bought each year.

First grade high schools. There should be a general library of well selected books, for pupils of high school age, of not less than 600 volumes. At least 150 volumes of these should be bought each year.

The books for school libraries should be selected from the School Library Manual. The books should be properly marked, classified, and arranged in a case or library room with sufficient shelving to make each book accessible.

Textbooks and sets of supplementary readers should not be considered as library books.

26. *Qualifications of librarians.* Schools having an enrollment of 100-300 pupils should have a part-time teacher librarian who is a graduate of a teacher-librarian course in one of the State normal schools.

Schools having an enrollment of 300-500 pupils should have a full time librarian who is a graduate of a teacher-librarian course in one of the State normal schools.

Schools having an enrollment of 500-1,000 pupils should have a full time librarian who should meet the State requirements for certification of high school teachers, and in addition should have had at least a six weeks' course in library methods in an approved summer library school.

Schools with an enrollment of 1,000 pupils or over, should have a full-time librarian who should meet the State requirements for certification of high school teachers, and inaddition should have had library training in an approved library school, and at least one year's successful library experience in work with young people in a library of standing.

27. *Records.* Permanent records of the attendance of pupils and of the result of all instruction should be kept. Unforeseen needs for such records often arise many years after the pupil has left school, and great injustice is done when accurate records are not available.

The care of the permanent records is another matter to which superintendents and principals should give special attention. In some of the smaller high schools, especially, the record is placed

where everybody can have access to it. Frequently the records are found on the library shelf among the library books. The records should be kept in a place where no one but the superintendent, principal, or some person especially entrusted with the care of same can have access to it. In many of the smaller towns a good plan is to have the secretary of the board keep the records in a bank vault or some safe place other than the schoolhouse during the summer vacation.

V. THE JUNIOR HIGH SCHOOL

Organization and program of studies.

Purpose of the junior high school. The junior high school has arisen because of the demand, which is constantly growing more and more insistent, that our public schools should provide greater equality of educational opportunity. We are beginning to see that a successful democracy must depend not only upon the education of its people, but also upon types of education adapted to individual needs. We are now realizing more and more that individuals are not alike and that the education and training which is suited to one may not be suited to another. Unfortunately, our educational system has been and still is based very largely upon the principle that individuals are alike and that all can profit equally by a common course of training. It has not been possible to modify sufficiently the eight-year type of organization so that the varying needs of individuals can be met. The results of this failure are seen in the appalling elimination of pupils from school.

The Commission's recommendations. The following quotations are extracts from the bulletin on "Cardinal Principles of Secondary Education", one of the reports so far published by the Commission on the Reorganization of Secondary Education:

> "We recommend a reorganization of the school system whereby the first six years shall be devoted to elementary education designed to meet the needs of pupils of approximately six to twelve years of age; and the second six years to secondary education designed to meet the needs of pupils of approximately twelve to eighteen years of age.
>
> **In the junior period (grades seven to nine inclusive) emphasis should be** placed upon the attempt to help the pupil to explore his own aptitudes and to make at least provisional choice of the kinds of work to which he will devote himself. In the senior period (grades ten to twelve inclusive) **emphasis should be given to training in the fields thus chosen. This distinc**tion lies at the basis of the organization of junior and senior high schools."

A new type of school. The junior high school should, therefore, undertake a reorganization of the work of the last two grades of the elementary school together with the first year or the first two years of the high school. These three or four grades can best be organized as a more or less separate unit. They pre-suppose that the chief objects of elementary education shall be attained largely in the first six grades of the elementary school. Basing its work upon the assumption that the fundamentals in reading, writing, and arithmetic have been reasonably well attained and that certain elementary and fundamental concepts in geography and history

have been formed, it provides for a varied program better suited to the developing needs of young people. Further command of the fundamental operations is obtained not so much by continued formal drill as by practical application of the operations already learned.

In addition, subjects formerly considered the exclusive property of the four-year high schools are given a place. Among these are elementary science, general mathematics, community and vocational civics, practical arts, home economics; and as exploratory and elective subjects, foreign languages and commercial branches. Promotion is by subjects instead of by grades, and the work is to a greater or less extent departmentalized. The methods used are radically different from those of the elementary schools; e g., supervised study and the socialized recitation are essential features, and the social life of the school is organized from the standpoint of the young adolescent. This reorganization removes the dangerous break at the end of the eighth year, coördinates the elementary school with the high school by a transitional unit to weld together the elementary and secondary periods, and provides a new organization in which it is far easier to meet the many needs of adolescent pupils than under the old plan.

Advantages in small communities. An adaptation of this plan of organization is especially well suited to rural communities where the number of high school pupils is small. In many of these communities it is now impossible to maintain any kind of high school. In others, small third grade or second grade high schools maintain a precarious existence. In many of these the conditions are anything but conducive to good work. The small schools require each teacher to teach a much wider range of subjects than anyone is likely to be able to do well. Even at that, there is usually no opportunity for choice of work. This condition results practically in the denial of all educational opportunity for the pupils who can not profit by the single curriculum that is offered.

The organization of a junior high school consists of the seventh to the ninth years or the seventh to the tenth years inclusive. The former, wherever practicable and economical, is recommended. However, the latter is recommended under certain conditions:

> "In sparsely settled communities where a senior high school can not be maintained effectively, the junior high school may well be four years in length, so that the pupils may attend school nearer to their homes for one more year." ("Cardinal Principles of Secondary Education.")

In many communities that are remote from larger schools it is altogether likely that a junior high school of three or four years would grow naturally into a six-year high school. The opportunity for a try-out of various types of educational activity inevitably leads

to a retention of many pupils who would otherwise leave school. Moreover, successful experience will encourage a community to invest in still further opportunities. All of this tends to develop confidence in the school and to promote its growth.

A wisely planned program of studies. A word of warning should be given. Unless the new organization does actually provide better for the varying individual needs of adolescent boys and girls, there is no virtue in a change of name. To provide against such a contingency, the Department of Public Instruction will scrutinize very carefully every plan for such an organization before it gives its approval. The programs of studies of junior high schools will necessarily vary with the different local needs and conditions. In order to give help to those who wish to organize such schools a general outline of an acceptable program of studies is given below. Principals and superintendents are urged to send to the Department suggestions regarding desirable adaptations of the suggested program of studies. These will receive careful consideration.

The junior high school program of studies should be a resultant of several forces. It should be made up of four parts; first, a continuation of the elementary school curriculum, in the form of a review and amplification of these courses with a purpose of articulating the elementary and secondary courses; second, a preview of secondary school courses of study, with a rearrangement of such courses in their "simpler aspects, deferring the refinements" to later senior high school years; third, a prevocational content from the point of view of the industrial and commercial fields and from that of the home; and fourth, a liberal amount of social science materials and social and civic activities to the end of giving to the early adolescent a "self-conscious social adjustment."

In each course of study in the junior high school program of studies there must be a thorough internal reorganization of the preceding courses of study in the given subject as these courses were formerly organized for the last two years of the grammar school and the first year of the high school. No mere physical combination of grades seven and eight and the first year of high school with unchanged courses of study can even pretend to the reorganization of the program of studies which is the most distinctive characteristic of an actual junior high school. Such an organization can in some cases effect most desirable improvements by a new grouping of grades seven, eight, and nine with an administrative change to departmentalization, but it is not a junior high school. The junior high school is a "chemical product, not a physical combination."

Therefore, a wisely planned program of studies should continue, with modifications, the single curriculum of the elementary school.

Through its general courses of study (general mathematics, general science, prevocational courses, general social science, etc.), it should expand the single curriculum into an enriched and varied curriculum. The new resultant should in a gradually increasing degree become the initial stage of all secondary school curriculums. It should become the source of an apperceptive basis for later senior high school courses; it should "reveal higher types of activities, make these both desired and to an extent possible." It should offer assurance of intelligent educational choice and wise educational placement. It should make possible a tentative or provisional choice of electives. It should increase the probability that pupils will persist through the initial stages of specialized secondary school courses in the junior high school and thus also increase the probability that they will continue these courses and complete the specialized curriculums of the senior high school.

For those of the junior high school pupils who will not continue into the senior high school, the self-contained program of studies should provide a valuable educational return. For the drop-outs, therefore, every reorganized course of study should become a unit course of definite educational value in each year of its development. The same unit organization of the courses of study, with a continuous preservation of life contacts, convinces the pupils who will continue of the real value of the present units of the course. At the same time it reveals to them the higher possibilities of advanced units of the course and makes these desirable in the estimation of pupils and parents.

The enacting clause in the educational reorganization inherent in the junior high school is a new, reorganized, self-contained program of studies; thus only can the junior high school become a new educational force for the realization of its accepted and distinctive purposes.

A suitable apportionment of time. It is recommended that there should be a school year of at least nine months, a school day of six hours exclusive of the luncheon period and passage of classes, and six one-hour periods. Four of the periods are devoted, to a large degree, to the four major subjects (1) language, (2) mathematics, (3) social studies, (4) science and geography, and health instruction. A fifth period is devoted to fine and practical arts and guidance. The sixth period is divided into a fifteen-minute period for devotional or opening exercises at the beginning of the morning session and a forty-five minute period for organized school activities at times of the day best suited to each school.

In smaller schools, the sixth period may be required in part for the practical working out of the daily roster of the curricular require-

ments. The guidance work could be part of the home-room activities. There should be, if possible, a weekly assembly. However, it may be necessary to alternate assemblies with clubs or class meetings in connection with pupil participation in school control. The minimum time allotment in any school for organized activities should be two periods a week, as given above. The maximum would be five periods, four for pupil activities and one for faculty activities as given in the chapter on school activities of this manual. The balance of the sixth period may be devoted to one period a week for coaching or for work in spelling, penmanship, practical arts, or for any curricular requirements not provided for in the other five periods.

A transition school. The program of studies is shown by successive terms to give a clearer conception of the development from the single curriculum of the elementary school through the exploratory courses and the core curriculum with electives of the junior high school to the multiple or differentiated curriculums of the senior high school.

It must be clearly recognized that the junior high school is primarily a *transition* school. With other features of organization and administration, the program of studies must contribute to this fundamental purpose. Attention is, therefore, called to the progressive stages in effecting for early adolescent children the transition from the elementary school to the senior high school. To this end, the three-year period is divided into four stages, as follows:

1. *A term of adjustment—low seventh.* The single curriculum of the elementary school is continued, but in a form modified by departmentalization and by the increased facilities of the junior high school.

2. *A year of exploration and preview—high seventh and low eighth.* The single or core curriculum of constants is required of all pupils but in a form enriched and varied by exploratory courses which offer a preview of high school subjects.

3. *A term of provisional choice of electives—high eighth.* The core curriculum is continued with the first and provisional choice of electives. In this semester, the future educational placement of each pupil is to a large degree determined by this initial experience with specialized or differentiated courses of study. The initial choice should remain provisional for at least one semester to provide for correction of error in the original choice.

4. *A year of persistence through electives—ninth year.* The program of studies now becomes a core curriculum with electives, or, in other words, a constant-with-variables curriculum, or partially

differentiated curriculums. This final year should be devoted to stimulating the ambition of each pupil for educational advancement into the next higher type of school. The ninth year is the initial stage of partial differentiation preparatory to the multiple curriculums of the senior high school and higher institutions.

The sixty-minute period. The program of studies is adapted to a six-hour school day and a school year of at least nine months. It is also arranged on a basis of sixty-minute periods for the purpose largely of providing for supervised or directed study. A six-hour school day should not be followed by more than a very limited amount of home study in grades seven and eight.

In grade nine, supervised study can be applied in five-period-a-week subjects since three fourths credit for high school units is allowed where supervised study is in operation.

There are only two ninth year courses, viz., social studies and science, to which are allotted four periods a week. Though the total clock hours for the year fall below one hundred and twenty on the directed study basis, one unit credit will be allowed. The work in guidance, civics, and science of the seventh and eighth years offsets the diminished time allotment in the ninth year.

Pupil load. The program of studies is based upon a load for each pupil of seventeen or eighteen periods of prepared work a week in the seventh and eighth years, and nineteen periods in the ninth.

Adaptation of program to small school. The suggested program of studies can be applied to both small and large schools. An adaptation to a four-year junior high school is offered for the rural community school. There is also given a typical daily program for a four-teacher organization. This should demonstrate the practicability of the program of studies in the small school.

Where facilities in the smaller school are lacking for practical arts, agriculture, and home economics, a temporary classification will be given, on condition that the school directors will provide such facilities in the following school year. Blue prints are available upon request, showing a floor plan for the use of a class-room as an industrial arts shop. Suggestions will also be made upon request as to the minimum equipment necessary to inaugurate practical arts for girls and boys in a small school. The smaller schools should restrict electives to the needs of the majority of the pupils. The natural limitations in number of teachers, equipment, and facilities will be considered in connection with requests from small schools for classification. As a general principle, the Department will not approve the expansion of a four-year junior high school into a six-year high school unless additions are made to the number of teachers and the

school facilities. Otherwise, the effectiveness of the junior high school will be defeated by the additional burden of the eleventh and twelfth years.

Step by step change in curriculum type. It should be noted that the single curriculum type prevails in the seventh year and the low eighth term; that exploratory courses are required of all pupils in the high seventh and low eighth; that beginning with the high eighth and continuing through the ninth year a core curriculum with electives is suggested.

Occupational training. Occupational training for pupils who must drop out of school during or at the close of the junior high school period wil be largely restricted to the commercial, industrial or agricultural courses. These courses are, therefore, introduced at as early a point in the curriculum as is consistent with the underlying purposes of the junior high school.

Special rosters in the smaller schools or partially differentiated curriculums in the larger schools should be offered to drop-outs at the end of the seventh year or at any subsequent semester. The utmost care must be observed that only the small residuum of pupils who must drop out are classified in the group for occupational training.

Vocational value of ability in English. Secretarial or stenographic positions demand a high order of ability in English. It is suggested, therefore, that in the exploratory year one period or an average of one period a week of English work be devoted to determining the individual's fluency and clearness of expression range of vocabulary, and exactness in the technicalities of language, spelling, and penmanship.

Choice of electives. At the close of the low eighth semester, or at the middle of the three-year period, all pupils should, under careful guidance based upon thorough scrutiny of exploratory experiences, make provisional choice of electives for the high eighth semester.

For the sake of pupils whose initial choice of electives proves to be a mistake, an easy way of changing to other electives should be provided. This can be done in several ways—by postponing certain requirements for promotion to the middle of the ninth year, by arranging special rosters, by coaching, or by other opportunities to catch up with the work of the class in the new elective.

A Suggested Program of Studies.

Six period day				Sixty minute period
Adjustment	Exploration & Preview		Provis. Choice	Persistence
One Term Low Seventh	One Year High Seventh, Low Eighth		One Term High Eighth	One Year Ninth Year

Constants

*English (a)† 5	*English (a) 4	*English (a) 4	*English (a) 4	*English 5
*Gen. Math. (b) 4	*Gen. Math. (b) 4	*Gen. Math. (b) 4	(Opt. in Math.) (b)	(Opt. in Math.) (b)
*Soc. Stu. (c) 4	*Soc. Stu. (c) 4	*Soc. Stu. (d) 3	*Soc. Stu. (d) 3	*Soc. Stu. (h) } 4
*Science (e) 2	*Science (e) 2	*Science (f) 2	*Science (g) 2	*Gen. Sci. (h) }
*Geography (e) 3	*Geography (e) 3	*Geography (f) 2		
Health (i) 2	Health (i) 2	Health (i) 2	Health (i) 2	Health (i) 2
Ind. Arts (j) }	Ind. Arts (k) }	Ind. Arts (j) }	Ind. Arts (j) }	Ind. Arts (j) }
Agri. (j) } 2	Agri. (k) } 3	Agri. (j) } 2	Agri. (j) } 2	Agri. (j) } 2
Home Ec. (j) }	Home Ec. (k) }	Home Ec. (j) }	Home Ec. (j) }	Home Ec. (j) }
Music (l) 1	Music (l) 1	Music (l) 1	Music (l) 1	Music (l) 1
Art (l) 1	Art (l) 1	Art (l) 1	Art (l) 1	Art (l) 1
Guidance (m) 1	Guidance (m) 1	Guidance (m) 1	Guidance (m) 1	
		*Jr. Bus. Training (n) 3		
Sch. Activ. (o) 5	Sch. Activ. (o) 5	Sch. Activ. (o) 5	Sch. Activ. (o) 5	Sch. Activ. (o) 5

Electives (p) Elect One Group (q)

	*Gen. Math. (b) 5 *For. Lang. (r) 4	*Gen. Math. (b) 5 *For. Lang. (s) 5
	*Gen. Math. (b) 5 Fine Arts Courses: Music or Art (t) 4	*Gen. Math. (b) 5 Fine Arts Courses: Music or Art (t) 5
	*Com. Math. & Com. Geog. (u) 4 *Jr. Bus. Trg. & Bus. Writ. (v) 5	*Com. Math. & Typewrit. (w) 5 *Bookkeep. & Bus. Writ. (x) 5
	*Gen. Math. (b) 5 Ind. Arts } 4 Agri. } Home Ec. (y) }	*Gen. Math. (b) 5 *Gen. Sci. (z) 5 Vocational 1/2 Time (aa) 15

† Letters refer to notes below

* Prepared work

a. Including spelling and penmanship and one period a month for library instruction. One or two periods of time allotted to school activities could be used for spelling, penmanship, and library instruction. Until the school activities are fully in operation, it is desirable that this additional time be retained for the English course.

b. See Report of National Committee on Mathematical Requirements, Bulletin, 1921, No. 32, Bureau of Education, Washington. In the high eighth, and ninth year, there is an option in mathematics but no option of mathematics. Either general mathematics or the mathematics of the commercial curriculum are required of all groups.

c. United States history,—or United States history and community civics.

d. Community civics,—or United States history and community civics.

e. Science two periods and geography three periods.

f. Science two periods and geography two periods.

g. Science two periods.

h. All pupils, except those electing commercial courses, are required to take

vocational and economic civics or general social science. Commercial pupils are required to take general science—their later commercial courses will contain much of economic civics. A minimum of science will be required in the academic curriculum of the senior high school; general science, therefore, should be postponed to the tenth year for the academic group. General social science should be required of all groups in the ninth year except as indicated for the commercial group.

i. Personal hygiene, gymnasium, directed games, etc.

j. General shop with progressive course of wood-working and metal working through three years. Agriculture optional with industrial arts for rural schools. Home economics including sewing, cooking, textiles, laundry, millinery, dressmaking, dress and home design, and home training.

k. All boys for one term given an actual trade shop experience in a special trade type of shop equipment. The vocational side of practical arts stressed for one term for both boys and girls. Hence increase of time to three periods.

l. Additional time for fine arts may be provided by electing special work in school activities time, e. g., orchestra, glee, and musical instrument clubs, design and art clubs, musical or art appreciation clubs, etc. It is advised that the time allotment of sixty minutes be undivided for art and divided into two thirty-minute periods for music.

m. Classroom instruction in educational or curriculum guidance—both educational and vocational information for pupils *prior* to choice of electives.

n. Elementary business practices and principles common to all life careers and a brief survey of commercial education and of junior commercial occupations.

o. Weekly periods for (1) home-room period, (2) co-operative pupil government, (3) school assembly, (4) clubs, (5) faculty activities for professional study—a faculty esprit de corps for the cooperative solution of junior high school problems of both an administrative and instructional nature. Junior high school teachers must be trained through service; the most favorable condition should be established. Until the school activities program is in full operation, part of this daily allotment of time for activities should be diverted to English, practical arts, fine arts, or other curricular requirements.

p. Other electives than those listed may be provided in the club activities, e. g., art, science, English, dramatics, practical arts, or social service clubs. The groups of electives indicate partially differentiated curriculums. To facilitate cross-over between electives during this term, it is suggested that electives be made provisional, i. e., that promotion requirements in electives be deferred to the middle of the ninth year.

q. Partially differentiated curriculums continued; with twenty periods devoted to constants, fine and practical arts, and activities; and with ten periods devoted to electives. There are five major lines of curriculum choice provided in this year, viz., the academic, the fine arts, the commercial, the scientific or technical, and the vocational.

r. Optional choice of Latin or one modern language. Small schools should restrict choice to one foreign language. Eighth year course introductory—vocabulary building, social life of people, etc. Earlier choice of a foreign language for pupils of a high I. Q. is a program adjustment to each school. This earlier start of a foreign language should be an extension course opportunity in an enriched curriculum for special or accelerant groups.

s. First year high school course.

t. Provision is made in the chapter on the administration of the program of studies for full high school credit for music under specifications set forth in the syllabus in music. This option makes it possible for a pupil to begin his music with full school credit in the middle of the eighth year. Similarly, a course in art

may be pursued in districts where provision is made for a unit course in art similar to that outlined for music. This course, as in the case of music, may be given in or out of the school.

u. Two periods of each.

v. Forty minutes daily in junior business training, twenty minutes in business writing.

w. Forty minutes daily in typewriting, twenty minutes in commercial mathematics.

x. Forty minutes daily in bookkeeping, twenty minutes in business writing.

y. Four periods elective plus the two periods required in constants of this term give a total of six periods; five should be in special shops or advanced home training and one in drafting or design.

z. The fourth group of electives in the high eighth branches off into two curriculum choices in the ninth year, viz., first, the scientific or technical curriculum paralleling the academic in preparation for higher institutions, and second, the vocational or trade curriculum. In the former, general science in the ninth year replaces the practical arts elective of the high eighth; but practical arts is still continued for this and all other non-vocational groups to the extent of two periods as a required subject.

aa. Smith-Hughes curriculum organized as a ninth year elective, but over-age pupils should be transferred to this curriculum during seventh and eighth years, when *definitely* determined that alternatives of vocational curriculum or leaving school are unavoidable. All such transfers are problems of individual adjustment. The academic work should include English, social studies, and related mathematics for a weekly total of ten periods. These pupils should participate in school activities on an equal basis with all others.

A Suggested Program of Studies For a Rural Community Four-Year Junior High School.‡

Nine month year | Six hour day | Sixty minute period

7th year		8th year		9th year		10th year	
*English	5	*English	4	*English	4	*English	4
*Social Studies	4	*Social Studies	3	*Social Studies	4	*Social Studies	4
*Mathematics	4	*General Math.	4	*General Math. or Commercial Math.	5	*Geometry or Bookkeeping	5
*Geo. & Science	5	*Geo. & Science	4	*General Science	5	*Elective Sci.	4
Health Educ.	2	Health Educ.	2	Health Educ.	2	Health Educ.	2
Music	1	Music	1	Music	1	Music	1
Art	1	Art	1	Art	1	Art	1
Guidance	1	Guidance	1				
Agriculture, Indus. Arts, Home Econ.	3	Agriculture, Indus. Arts, Home Econ.	3	Agriculture, Indus. Arts, Home Econ.	2	Agriculture, Indus. Arts, Home Econ.	2
Activities	2	Activities	2	Activities	2	Activities	2
Spelling and Penmanship	2	Spelling and Penmanship	2	One elective			
		*Jr. Bus. Train'g	3	*Commercial W'k or Agriculture, Indus. Arts, Home Making or *Foreign Language	4	*Commercial W'k or Agriculture, Indus. Arts, Home Making or *Foreign Language	5
Total periods	30	Total periods	30	Total periods	30	Total periods	30

‡For practical application of this program of studies see the "Typical Daily Program for a Junior High School with Four Teachers."

*Prepared work.

Typical Daily Program for a Junior High School with Four Teachers. Grades 7-8-9-10.

Per.	Day	Time	Principal Home Room 10th	Lang. Tchr. Home Room 8th	Sc. & Soc. Stud. Tchr. Home Room 7th	Math. & Home Econ. Tchr. Home Room 9th
15		8:45-9	Devotional or Opening Exercises			
60	M	9-10	Alg. 9-10	English 8	Soc. Stud. 7	Commercial 9-10
60	Tu		Alg. 9-10	English 8	Geog. & Sc. 7	Commercial 9-10
60	W		Alg. 9-10	English 8	Soc. Stud. 7	Commercial 9-10
60	Th		Alg. 9-10	English 8	Geog. & Sc. 7	Commercial 9-10
60	F		Alg. 9-10	English 8	Soc. Stud. 7	Commercial 9-10
60	M	10-11		English 9-10	Soc. Stud. 8	Gen. Math. 7
60	Tu			English 9-10	Health 8	Gen. Math. 7
60	W			English 9-10	Soc. Stud. 8	Gen. Math. 7
60	Th		Gen. Sc. 9-10	Soc. Stud. 8	Health 8	Gen. Math. 7
60	F			English 9-10	Soc. Stud. 8	Gen. Math. 7
60	M	11-12		English 7	Soc. Stud. 9-10	Gen. Math. 8
60	Tu			English 7	Soc. Stud. 9-10	Gen. Math. 8
60	W			English 7	Soc. Stud. 9-10	Gen. Math. 8
60	Th			English 7	Soc. Stud. 9-10	Gen. Math. 8
60	F			English 7	Health 9-10	Gen. Math. 8
60	M	1-2	Ind. Arts or Agri. 7	For. Lang. 9-10	Geog. & Sc. 8	Home Econ. 7
60	Tu		Ind. Arts or Agri. 8	For. Lang. 9-10	Geog. & Sc. 7	Home Econ. 8
60	W		Ind. Arts or Agri. 7	For. Lang. 9-10	Geog. & Sc. 8	Home Econ. 7
60	Th		Ind. Arts or Agri. 8	30 For. Lang. 9-10	Geog. Sc. or Soc. Stud. 7	Home Econ. 8
60	F		Ind. Arts or Agri. 8	30 Music 7	Art 7 Art 9-10	Home Econ. 8
60	M	2-3	Gen. Sc. 9-10	Health 7		1st Lessons Business 8
60	Tu		Ind. Arts or Agri. 7	30 Music 8 30 Coaching 8	Art 9-10	Home Econ. 7
60	W		Gen. Sc. 9-10	Health 7		1st Lessons Business 8
60	Th		Ind. Arts or Agri. 7	30 Music 9-10	Art 8	Home Econ. 7 1st Lessons
60	F		Gen. Sc. 9-10	30 Coach. 9-10	Coaching 7	Business 8
45	M	3-3:45	Guidance 9-10	Guidance 8	Guidance 7	
45	Tu		Assembly & clubs on alternate weeks, four teachers participating			
45	W		Ind. Arts or Agri. 9-10	25 Spell. 7-8 20 Penman. 8	25 20 Penman. 7	Home Econ. 9-10
45	Th		Home Room Activities & Coaching 9-10	Home Room Activities & Coaching 8	Home Room Activities & Coaching 7	
45	F		Ind. Arts or Agri. 9-10	25 Spell. 7-8 20 Penman. 8	25 20 Penman. 7	Home Econ. 9-10

Whenever possible, the practical and fine arts should be taught by part time instructors who come to the school for a continuous program of a half-day or more in the special subject. Industrial arts, agriculture, home economics, music and art will then be taught by the regular teachers only to the extent that these subjects are not taught by part time instructors.

The above program, therefore, represents the maximum organization required of any four-teacher school. It is not recommended except when unavoidable. It is

submitted only to demonstrate the practicability of the junior high school program of studies in a four-teacher organization.

ESSENTIALS FOR JUNIOR HIGH SCHOOL CLASSIFICATION

Types of organization. The State Department will adopt the general practice prevailing in the country at large of designating a junior high school as including grades 7, 8, and 9.

1. These grades may be segregated as a distinct school unit, which is recommended where practicable.

2. These grades may be included with the 10th, 11th, and 12th years, forming thereby a six-year secondary school unit. This type of organization may be advisable for smaller cities, boroughs, and larger rural communities because of the economy of administration and the reciprocal gains to both junior and senior units. These gains arise by reason of the increased total enrollment and the greater flexibility consequent to a large organization.

3. Grades 7-10 may be classified as a junior high school provided the conversion of an existing second or third class high school into a junior high school is dependent upon this type of organization, and provided, also, that in each case clear evidence is presented to the Department of the necessity of including the 10th year.

Where local conditions require that the junior high school be housed with grades 1-6, or with any part of the elementary school, one principal should exercise administrative control over both the junior high and the elementary school. The principal may also exercise supervisory control over the elementary school, if other supervision cannot be provided.

It is strongly recommended that the clear distinction between the elementary grades 1-6 and the secondary grades 7-12, as established by the "Commission on Reorganization of Secondary Education", be accepted as the basis of organization and administration. The junior high school must be recognized as the first unit of the secondary school, the six years of which correspond with the adolescent ages of approximately 12 to 18 years.

Permanent classification. There should be a minimum enrollment of 100 pupils and a faculty of four teachers for the following reasons:

1. The present unsatisfactory conditions in many second and third class high schools, with one or two teachers and a pupil enrollment of 15 to 40 pupils, should be avoided in a reorganization on the junior high school basis.

2. Four teachers will make possible departmentalization in the four major branches: (1) English and foreign language, (2) social studies, (3) mathematics, (4) geography, science, and health.

3. A four-teacher staff, including the principal as one of the four teachers, should provide some free time to the principal for supervision, administrative direction of the school's guidance program, the school activities, and other executive duties. This free time should approximate one-third of the school day in a junior high school organized on the minimum basis and should be increased proportionally for larger schools.

4. A teaching staff of fewer than four teachers places such restrictions upon the organization and curriculum of the junior high school as in effect to defeat its

fundamental purposes—"departmental instruction, promotion by subjects, exploration of pupils' aptitudes, choice of subjects under guidance, prevocational courses, and a social organization that calls forth initiative and develops the sense of personal responsibility for the welfare of the group" (Cardinal Principles, pages 18-19)

Temporary classification. If the initial organization does not exceed 75 pupils and a staff of three teachers, the school will be classified as a junior high school for a period of not more than two years, provided the following conditions be met:

1. The evidence is clear that consolidation with one or more adjoining districts, so as to include their 7th and 8th grades in the consolidated junior high school, is impracticable.

2. (a) There is evidence of an anticipated increase of enrollment to the minimum basis of 100 pupils as the 7th and 8th grades advance to the 9th and 10th.

(b) There is evidence of an anticipated increase to the same minimum by prospect of later consolidation when adjoining districts can provide transportation and are convinced of junior high school advantages through demonstration in the neighboring community.

3. The community is willing to assume financial responsibility for at least four full-time teachers for the junior high school.

4. An additional fourth teacher will be added to the staff when the enrollment reaches 100.

Part-time instruction. In the case of a minimum teaching staff of four teachers it is recommended that, in addition to the staff of four teachers, the fine and practical arts—music, drawing (art), industrial, agricultural, commercial and home economics—be taught by instructors on a part-time arrangement with adjoining or nearby districts.* This arrangement may provide that an instructor in industrial arts or agriculture is to give half time to each of two schools, and his salary is to be prorated between the districts. Health education, commercial courses, music, and art may be similarly taught by one instructor in two or more schools. Where advisable, these special instructors may include elementary grades in their programs. If the above plan is temporarily or permanently impracticable, the arts courses must be included as special subjects in programs of the regular teachers. Until the school can provide a librarian, one teacher should be designated as teacher-librarian and should have the supervision of the school library in addition to her regular teaching. This teacher may be excused from the duties of a home-room counselor.

Part-time instruction in agriculture or industrial arts for boys and in home economics for girls should be scheduled for the same periods on the same day of the week. The regular teaching staff will then

*Part-time teachers must be officially employed by one board of directors whom other boards pay for such service as the teachers give them.

be relieved of classroom duties. This free time should be used, once a week, for faculty meetings and conferences. In this way, the faculty activities suggested in the chapter on School Activities can be undertaken in the small schools.

Home-room counselor. Each class unit should be under the control and guidance of a home-room counselor. Junior high school pupils are too immature for self-direction; they still require the wholesome type of teacher guidance that prevails in the one-teacher control of the elementary school. From the standpoint of the faculty each teacher, either as a home-room or associate home-room counselor, should participate in the guidance program of the school, to the end that guidance may become a primary responsibility with all the instructional staff.

School activities. Every junior high school should develop an organized activities program. A suggested program, which has actually been tested under junior high school conditions, is given in the chapter on School Activities in this manual. This chapter on School Activities should be included in the matter of securing junior high school classification.

Subject promotion. Subject promotion should prevail throughout the junior high school. In order that subject promotion may actually and successfully operate, some provision must be made that pupils may regain a full grade classification where this has been lost by subject failures. Hence remedial and preventive measures in subject nonpromotion are essential. In the small school, coaching periods should be included in the teachers' programs. A discussion of the organization of coaching and opportunity classes will be sent upon request to the Department.

Guidance program. The guidance and educational placement of pupils through exploration and testing of their initial choices of electives should be accepted as a primary purpose of the junior high school. Means to this end will be determined somewhat by the size of the school, but guidance should permeate the program of studies and every school activity. There should be in each school the guidance of the home-room counselor; administrative direction of all guidance activities by the principal; educational and vocational guidance content in the course of study, particularly, in the social studies and English; guidance objectives in the socialized activities; and, where practicable, definite guidance class instruction under the direction of a special teacher who devotes all or the major portion of her time to this objective. Guidance in the junior high school must be recognized as a primary administrative and instructional responsibility. See chapter in this manual on Guidance.

Supervised study. The sixty-minute period should provide for supervised study. In a six-hour school day, all school work should be done, so far as possible, within school hours, particularly in the seventh and eighth years. Home work should be required in the exceptional cases of subject failures and retarded pupils. Follow-up work in the environment outside the school may, of course, always be encouraged for all pupils. Some home study, in a gradually increasing amount, may be required in the ninth year as preparatory to home study during the tenth, eleventh, and twelfth years. Supervised study is the chief objective of the lengthened period. A brief discussion of this subject and of the socialized recitation is given in the chapter on Instruction in this manual.

Curriculum requirements. See the suggested program of studies in Part 1 of this chapter on the junior high school. Attention is also called to the general comments preceding the program of studies and to the typical daily program following the program of studies.

Teachers' qualifications. Certificates which are not restricted to the elementary field are valid for teaching in the junior high school.

Holders of standard certification whose certificates do not authorize them to teach in the years covered by the junior high school, may have this privilege added to their certificate upon presentation of a rating card showing successful experience in grades above the sixth.

Holders of standard certification whose experience has been restricted to grades below the seventh, may qualify for teaching in the junior high school by the satisfactory completion of not less than twelve semester hours of approved training, not less than four semester hours of which shall have been in junior high school education and the remainder in a subject or subject field of the junior high school curriculum. Such certification will entitle the holder to teach such subject or subject field in addition to the subjects prescribed for the elementary curriculum.

Building requirements. In addition to classrooms and home-rooms, the junior high school should include building facilities for industrial arts or agriculture, home economics (cooking and sewing), an auditorium, a gymnasium, and a library.

Practical arts. Where equipment facilities in the smaller schools are lacking for industrial arts, agriculture, and home economics, the organization should not be delayed for this reason, provided a room for industrial arts or agriculture and a room for cooking and sewing are available. Instruction in these branches may temporarily be restricted, if local conditions necessitate, to an informational character with practical applications carried on at home or by junior pro-

jects out of school. Each community will come gradually to appreciate the need of adequate facilities and will respond more readily to the demonstration of such needs than to their anticipation.

Auditorium and Gymnasium. Where an auditorium and a gymnasium can not be provided, two or more adjoining rooms, by means of movable partitions and movable seats, may be opened together for assembly or playroom and gymnasium. In buildings where both the auditorium and gymnasium can not be provided, the auditorium floors should be level and should be equipped with movable seats so that the auditorium may be easily and quickly converted into a play-room or gymnasium.

Section 604 of the Code:

(a) No school building shall be erected without a proper playground being provided therefor.

(1) At least thirty (30) square feet per pupil shall be provided in other than rural districts.

(2) Not less than one (1) acre, and two (2) if possible to secure the ground, shall be provided in rural communities.

Library. The library should be a separate unit with seating capacity of at least ten per cent. of the pupil enrollment.

Building and equipment suggestions. Suggestions upon building plans will be submitted upon request to the Bureau of School Buildings. Districts should submit preliminary plans of all contemplated building operations. Suggestions upon room equipments for industrial, agricultural, home economics, commercial, and vocational training, for geography and science, music, drawing, the gymnasium, library, or other special activity will be furnished upon request to the bureau or subject director having the particular activity in charge.

Possible exceptions to essentials for junior high school classification. It is recognized that some fourth class districts, by reason of geographical environment and of impracticability of consolidation, will not be able to meet all the essential requirements. Each such district will be individually considered. The request for junior high school classification should be submitted to the Department with a statement of geographical conditions, maximum pupil enrollment by years, number of teachers with qualifications, building facilities, ability of district to equip building, a program of studies, and, if possible, a daily roster of classes.

It should be clearly understood that the authorization of an organization of grades seven to nine, or seven to ten, as a unit does not carry with it classification as a junior high school. Official classifi-

cation, which involves payment of teachers as high school teachers under the Edmonds' Law, will be made only after approval of building, equipment, organization, and instruction.

It is not the purpose of the Department needlessly to deprive any community of a junior high school organization, but to assist all communities in securing the maximum benefit from such an organization. It will be recognized that the essentials as given are based upon a limited experimentation. From time to time, therefore, it will be necessary to revise this preliminary statement. For this reason, the Department requests suggestions of modification.

VI. ESSENTIALS OF SECONDARY SCHOOL OPPORTUNITIES

Educational thought has changed materially concerning the high school within the last few years. There are at present nearly ten times as many boys and girls in American high schools as there were thirty years ago. This change has come about largely because the high school has offered larger opportunities by broadening its program of studies. It is clear that no community can be said to provide adequately for the secondary school needs of its young unless it affords the following types of work.

1. *College preparation.* While the colleges have been growing more and more liberal in their recognition of the newer subjects incorporated into the high schools, no college as yet gives credit to all the subjects in an up-to-date high school.

It is perfectly clear that the high school must provide for the comparatively small group of young people who wish to enter college. This involves, for those who wish to enter engineering courses, adequate preparation in mathematics, and, for many others a course containing at least four years of foreign languages. It also involves four years of English, a year each of physics and chemistry with adequate laboratory equipment, and at least two years of history.

Approximately ten per cent of the pupils entering high school go to college. The fact that in some schools as many as fifty or sixty per cent of the graduates go to college is frequently evidence that the school is so largely concentrating its attention on college preparation that pupils not headed for college are apt to drop out before reaching the senior year because they find that the school offers them a meager return for their effort. The chapter on guidance discusses the problem of assisting pupils in the selection of a curriculum. The desirability of collegiate education,—particularly of the traditional type—for all seekers is open to serious question. While there should be constant effort to increase the number of pupils going on to advanced educational opportunities suited to their individual needs, adequate attention should always be given to those whose education must end in the high school.

2. *Commercial education and training.* It is not unusual to find a community providing fairly well for the needs of the college preparatory group and failing to provide anything for the very large group of young people who wish to enter business. Many such communities require many young people to travel considerable

distances and pay from ten to twenty dollars a month for a year or more in business colleges in order to secure the training that in all justice ought to be furnished by their home communities. This type of education is desired particularly by girls, whose safety is frequently endangered by absence from home. It is not a square deal to furnish free education for the young person of fairly good financial circumstances who is preparing for college, and to refuse the training for the necessary job just ahead to the young person who must go to work because of financial stress.

In the large city schools where adequate training is provided, the number of commercial pupils usually approximates fifty per cent of the total registration. What is perhaps of more importance to the community, in the public high school these young people are not only securing commercial training which will enable them to serve the business world, but they are at the same time getting an all-round education in English, science, mathematics, and social studies which is essential to the best type of citizenship.

3. *Home economics.* The census of 1910 showed that of all women in the Unitel States twenty-five years old and over, eighty-six and seven-tenths per cent were married. In the newer conception of secondary education as an all-round preparation for life, little argument is needed to show how essential is a training in home-making. Such essentials as cooking with a knowledge of balanced ration, home nursing, dress-making, millinery, and understanding of household budgets and accounts, and the fundamentals of child psychology should be a part of the secondary education of every girl.

4. *Practical arts.* More and more the high school is furnishing an elementary training in various practical arts. The tremendous increase in numbers in the American high school means that it has gripped hundreds of thousands of young people who formerly went directly into the various occupations.

If these pupils are to be retained and adequately educated, the school must render the kinds of service they need. It is useless to hope to keep them in a school that offers only the traditional curriculums. So generally has this fact been recognized that no large city high school is being organized today that does not provide wood-working and machine shops and often, in addition, training in such lines as electricity, sheet metal working, foundry, architecture, and other activities.

5. *Agriculture.* It is most unfortunate that the high schools in our rural communities have largely trained the best young people of the communities only to send them away. Not only for the sake of

the communities, but also for the sake of thousands of young people in agricultural districts, adequate training in agriculture is essential. Along with this, of course, should go a broadening education in the fundamentals which should be the basis of all high school work. Existing rural high schools should be reorganized with a view to their specific service to rural communities. Where no high school facilities are available, rural community vocational schools and schools with vocational departments should be organized so that they will help to check the drift of our young people to the city by furnishing them with a genuine education which shall at once enrich the social life of the country and open to our youth an understanding of the sciences and arts in agriculture, which shall make them more efficient leaders in rural life. The increase in State funds made available under the Edmonds' Law will promote this development in many more communities than could have been served with the limited resources of the Smith-Hughes Law.

Advantages of larger schools. There are other lines of work such as intensive instruction in art and music and specialization along lines of literature, history, science, mathematics, and foreign languages, which ought to be possible in the modern high school. It is perfectly obvious that it is impossible to furnish anything like adequate high school facilities without a considerable number of pupils. Any attempt by a single small community to furnish all of the various lines of instruction suggested above will result in a cost far beyond its ability. The half dozen pupils who can best be served by a course in agriculture and the twenty-five or so who desire instruction in commercial lines have the same right to the services of the community as have the five or ten who wish to go to college. Classes of three or four, or even a dozen pupils, are tremendously expensive. It is evident, therefore, that we must look toward the concentration of our high school opportunities wherever it is at all possible.

The rural high school. The problem of providing adequate high school opportunities for the young people of the rural districts is perhaps the most difficult one connected with secondary education. Many communities are so isolated that not more than twenty to forty pupils can be conveniently brought together. The omission of any one of the five types of instruction is sure to work an injustice to some of these pupils. Yet it is obviously impossible to furnish all types of instruction without making the cost of the buildings, equipment, and instruction prohibitive. In such cases choice must be made of the kinds of work that will at once render the largest service to the largest number of pupils and the best return to the communities. There is reason to believe that emphasis upon practical

arts, agriculture, and home economics will result in a large growth in the service and in the numbers of the rural high school.

Whatever the development of secondary education may be, it will fail in one of its most vital functions if it does not provide adequately for the education of country boys and girls. Our people must think and feel not as a member of a capitalistic class, a labor class, or a farmer class—but as Americans. Liberal provision for the participation of country youth in a broad and generous educational program is the most hopeful means of insuring this solidarity of thought and sentiment. Thus far in our history the rural communities have furnished much of our political, social, and economic leadership. Habits of industry are promoted by country life. A sense of relative values, a disregard of petty annoyances and discomforts, and a devotion to worthy ambitions and ideals are promoted by freedom from the myriad distractions of city life. If we provide liberal educational advantages, we shall continue to draw inspiration and leadership in due proportion from the unexhausted life of the country.

But the country high school must not fail to enrich the life of the country. Purely traditional and so-called cultural courses have directed the ambitious boys and girls to the distant college as they must continue to do, but the absence of any other type of work has sent away disheartened thousands of other boys and girls to whom the school owed equal service. In addition to its purely academic work the rural school must offer courses particularly adapted to the needs of the country, and its pupils must use on the farms and in the hamlets those contributions of science, literature, and art that will most directly improve the moral, social, and economic well-being of the rural community. It would be difficult, for example, to overestimate the contribution that wisely reorganized instruction in science can make to the broadening of thought and the effectiveness of effort in country life. As a common center for both rural and urban school, the courses in English, history and the social studies, and health should lay the foundation for appreciation of our common heritage and for an understanding of our common problems.

The six-year high school. An administrative device that promises improvement in a considerable proportion of rural districts is the inclusion of grades seven and eight in the high school. Where the number of pupils is not sufficient to warrant a separate organization, the advantages of departmental instruction and of some opportunity to try out various types of educational and vocational instruction can be provided in a six-year high school. For example, a shop with wood-working tools, a forge, sheet-metal equipment, and possibly some facilities for simple electrical work can be provided. The work

of this shop can be closely coördinated with the needs of the rural home and the farm, and the interest of both pupils and community stimulated. The provision of home-economic equipment and courses serves a similar purpose. The experience in many rural community vocational schools and schools with vocational departments has shown the value of this type of work.

It is the purpose of the law defining the junior high school to encourage the provision of the occupational work and the exploratory opportunities characteristic of the junior high school. Responsibility for the classification of grades seven and eight as a part of the high school is placed upon the State Council of Education, and to secure this approval the curriculums and organization must provide adequate advantages beyond those of the traditional academic subjects. In the great majority of rural communities, however, it will be wise to organize the seventh and eighth grades with the high school, even if it is impossible to meet the requirements for junior high school classification. Three teachers for grades seven to ten inclusive can cover the work of these grades better by departmental instruction than by a division on grade lines. Classification as a third grade high school would automatically give recognition to one of these teachers as a high school teacher. The Department of Public Instruction will be glad to assist in adapting this form of organization to local conditions and needs.

VII. GUIDANCE IN THE HIGH SCHOOL

A changing educational problem. Broadly considered, the whole process of education is one of so guiding the child as to develop his best individual possibilities and to prepare him for helpful participation in the coöperative activities of society. Teachers have always realized that their instruction in subject matter was only one means to a larger end. Many distinguished careers bear testimonial of the potent touch of a sympathetic personality which has changed for the better the current of an influential life.

Under simpler conditions the unorganized influences of society exercised a more or less fortuitous guidance of youth. Modern industrialism and city life, while broadening the experiences and the contacts, have made human relationships less personal. Rural communities as well have come under this influence. The unparalleled growth of our high schools has tended to mechanize the educational process. The expansion of high school programs of studies has attracted young people destined for every social sphere. All of these conditions make it imperative that the important function of guidance in education be so organized that its helpful influence may not be left to chance.

A definition of guidance. The term, *guidance,* as we generally use it in school work refers to those aspects of school work which aim to assist the pupil to choose wisely among the subjects and activities of the school and among possible vocational careers and life objectives. These efforts at guidance must be based upon knowledge of individual capabilities and needs on the one hand and upon an understanding of the economic and social demands of the community on the other. These objectives include among others, vocational usefulness; worthwhile citizenship; moral and ethical character; appreciation of art, literature, and music; good health; worthy use of leisure; and worthy home membership. Other objectives might be included.

During recent years many means and methods have been developed which supplement instruction in the traditional school subjects. Some of these are the use of psychological tests and measurements, participation in community enterprises, school activities, and student participation in school government, the use of projects, a closer relation between the school and the home, a specific study of responsibilities to be met by the pupil in a higher school, in the community, or in employment. All these activities are included in a program of guidance.

Therefore guidance is concerned with something more than the selection of future studies or the choice of future vocations. An ef-

fective guidance program in a school should enrich the school experience of each child. It should bring the teachers, and through them should bring the pupils, to a clearer understanding of the relation of the school to the home, the community, and employment. It should result in purposeful student activities; in the development of such mutual understanding and confidence between teachers and pupils that the school may give to each child, in proportion to his capacity, an abundant preparation for life.

The pupil's need of guidance. Pupils differ from one another in native ability for school work as well as in character and temperament. They need guidance from the time they begin school and thenceforward through graduation or elimination from school to a safe launching into the years that follow.

The recent development of standardized tests of intelligence and of achievement in school work makes possible a classification of pupils into groups of different ability. In the elementary school the curriculum should be modified to meet the needs of at least three groups, with differentiation in content, method, and expected rate of progress. In secondary schools large enough to make it practicable different curriculums should be offered, and the pupils in each should be divided according to their ability into at least two groups.

Wherever these departures from the traditional curriculum are developed, individual guidance is no longer a post-mortem affair struggling with problems of over-age, dislike of school, and mental stagnation. It becomes directive and preventive, rather than remedial. Repeated failure in school work is not evidence of high educational standards. It leads not only to elimination from school but also to careless habits which are a detriment to school work and a handicap to the pupil in his later life.

Curriculum guidance. With the increasing differentiation of the various curriculums and electives in the senior high school and the four-year high school, the problem of curriculum guidance assumes increasing importance. Studies of elimination have proved that pupils leave school more frequently because of discontent with their work than because of financial necessity. The guidance program should usually be able either to prove to the pupil the unreasonableness of his discontent or to adjust his work so as to enlist his interest. The junior high school is designed to meet this need. It offers a service that has its fundamentals in guidance, both for the child going on in school and for the drop-out. The home rooms, clubs, other activities, the variety of experience, and the seventh and eighth grade course of instruction in guidance all aim at this more personal service to pupils.

Vocational guidance. Misunderstanding of the term *vocational guidance* has frequently discredited well-planned efforts to promote the interests of the pupils. The best the school can do is to give an understanding of various occupations, teach pupils to weigh the advantages and disadvantages of those that appeal to them and to estimate as justly as possible their own abilities and temperament in relation to the vocations considered, keep the door open for the almost inevitable shift of adolescent interest, and educate as broadly as it can. This will involve not only a thorough knowledge of the demands of various occupations, but also a mastery of applied psychology with particular emphasis on *applied.*

For pupils who must leave school early some specific training can be provided. In preparing pupils to take their places in the economic world the school should aim not only to train but also to educate. It should particularly endeavor to make its charges understand the fundamentals of our economic organization and the inevitable demands involved in its membership. A lesson it will not fail to teach will show the difference between the position that has possibilities of development and the relatively more remunerative blind-alley job. The possibilities of growth through additional training and the opportunities available for the training should be presented so as to appeal to the physical and intellectual types fitted for different lines of work. Here the guidance expert becomes the most valuable adviser of the maker of curriculums and courses of study.

Other guidance activities. Avocational, recreational, and physical guidance, moral and social guidance, and guidance with the cultural values of life in view, all have a place in the guidance program. Well organized extra-curricular activities are among the best means of enlisting interests of pupils along these lines. The clubs, musical organizations, athletics, school journalism, and most of all the student participation in the government and administration of the school offer educational possibilities often surpassing those of the curriculums. If the aim of the schools is "to teach pupils to do better the desirable things they are going to do anyway", these activities, which in their very nature teach pupils the difficult art of joining in coöperative activity with their fellows, are of prime value. Moreover, their service in saving pupils for the school and in enlisting their interest in the subject matter of the curriculum would alone justify their existence.

The class-room teacher often has much to give in these aspects of guidance, and much to receive in return. Not only can these interests be made to vitalize instruction—they can as well be made to provide an interested approach so as to win the confidence of pupils, and to enlist their best endeavor in the work at hand.

Guidance agencies in the school. These agencies are human agencies—teachers and principals, and, in a large district, heads of departments, supervisors of special subjects, psychological examiners, medical inspectors, school nurses, home visitors, and attendance officers. High school principals have very generally accepted as one of their most important duties their function as counselors of their pupils. The many and varied executive duties of the principal of a large school, however, often seriously limit his service in this capacity. For the sake of that intimate contact with the educational, vocational, and social problems of his pupils which is essential to him as a leader, the principal can not afford to neglect personal participation in the organized guidance program of the school. At the same time, in any but the smaller schools, a delegation of definite responsibility with appropriate time allotment is essential to a successful guidance program.

Department instruction, which is universal in high schools, tends to concentrate the thought of the teacher upon the problems of his particular field of learning. He, as much as the principal, needs the humanizing influence of definite responsibilities in the guidance of the pupils.

Every junior and senior high school teacher should, therefore, feel the conscientious responsibility of participating in the guidance program of the school. Not to have a part in this function indicates a failure to realize the essential purpose of the school. Too often guidance has been subordinated to the mastery of subjects, with the result that many pupils have accumulated useless learning which not infrequently has hindered rather than helped their adjustment to practical life.

Guidance through organization. A guidance program is dependent from the very start upon the organization of all the agencies in the school. The superintendent or supervising principal should take the initiative for the district, and the principal for the school unit. As soon as possible, however, the larger district should have its central guidance committee, or steering committee composed of school administrators, and the school should have its committee on guidance. The school committee should, if possible, have one or more members, including the chairman, given time in school hours for this work. These should ultimately become expert through experience and special study. Following their appointment, the guidance committee in each school should meet, and, through proper organization and coöperation with principals and teachers, devise measures for recording the personal history, interests, home environment, and the physical, mental, and moral characteristics of every child in the school. All information obtainable from previous school records, mental tests, and var-

ious other school agencies should be made readily available. This can be arranged through some such plan as an indexed cumulative envelope requiring no transfer of data. It should always be recognized that no organization can take the place of the personal contacts between teacher and group and teacher and individual pupil. These contacts can, however, be made much more helpful by the information such a collection of records will afford. Any record system should be kept as simple as possible, and the counselor must avoid the obvious danger of devoting to the mere keeping of records time and thought that should be applied to personal contact with pupils.

The chairman of the guidance committee. The chairman of the guidance committee should have definite responsibility for the guidance program of the school. It goes without saying that he should be thoroughly in touch with the best theory and practice in guidance, and that the principal and teachers should look to him for inspiration and leadership in this field. With his committee he should counsel with individual teachers and arrange meetings of groups of teachers having similar problems, and meetings of the entire faculty. He will of course meet students both as individuals and as groups. At the same time he will keep in close touch with business and industry, and with schools of higher grade so as to be able to direct his pupils in the next step in their occupational or educational careers. The chairman of a school committee especially should have a liberal allowance of time for this important function. As the system grows and its usefulness becomes evident, it will in the large city school require at least the full time of a teacher. Principals and boards of education should recognize its value and provide liberally for the system because it will, if efficient save many pupils for the schools and increase beyond measure the service of the school to all of its charges. Guidance of boys and of girls presents essentially different problems in some respects. If the chairman is a man, he should have the constant assistance of one or more women representatives of the faculty, and vice versa.

Placement. The school should have a placement bureau as an integral part of its guidance service. This bureau will necessarily keep in intimate touch with the vocations that pupils will enter, and will readily respond to requests for employes. It can thus be of service to both pupils and employer. Close coöperation will very often result in saving promising pupils for the school through temporary part-time employment. No small part of its service will be its follow-up work to ascertain what openings are suitable, to insure right attitudes of mind on the part of pupils and employers, and to bring back to the school the information that will lead to a better adaptation of its work to the needs of the business world. In doing this

it must always remember that it is an educational institution designed for the betterment of society and not an agency through which youth may be exploited. Rightly conducted the placement function may become one of the strongest agencies in harmonizing the school and the business community and in establishing a mutual confidence that will insure adequate provision for the expansion of school opportunities.

Guidance in the small school. It is obvious that the school having from one to four or five teachers can do comparatively little in the way of organized guidance. The close personal relations between teachers and pupils in some measure takes the place of the guidance organization of the larger school. The need of guidance, however, is quite as great in the small school, and the principal and teachers in such a school should give all possible attention to this important service. The organization of a guidance program for the district or county will of course afford the best means of directing this phase of the work of the school.

Outline for suggested organization of guidance in a high school.

I. *The organization*

(Under administrative control of superintendent or supervising principal)

A. Chairman of faculty guidance committee
B. Faculty committee
C. Entire faculty

II. *Functions....*

A. Curriculum guidance
B. Vocational guidance
C. Coordination-promotion of other phases of guidance

III. *Equipment*

A. Records of individual environment, qualities, and interests
B. Records of achievement in school
C. Records of personal conferences, home visits, intelligence tests, environment, and former school record
D. Educational opportunities detailed
E. Occupational opportunities detailed
F. Indexed cumulative envelope or other container for individual records
G. Suitable accommodations for private conferences, desk, telephone, and filing facilities.

IV. *Agencies and methods*

A. Faculty study of guidance under leadership of guidance committee chairman and principal
B. Development of suitable material for program through project committees
C. Contact of guidance committee with teacher and with pupils
D. Personal contact of teacher and pupil

E. Instruction in the regular curriculum
F. Group guidance discussions
G. Talks by representatives of various occupations
H. School contact with parents and home
I. Social life of the school—Articulation of school activities program with guidance; e. g., class programs, assembly programs, club activities, current events

The above outline expanded to cover in detail the entire plan of guidance for school districts of various classifications will be found in the general bulletin on school guidance activities.

VIII. INSTRUCTION

Why are you doing it? It has well been said that "a school is organized that it may be administered and administered that it may be instructed." Successful instruction requires that the teacher shall not only have a command of his subject and of the technique of its presentation, but also that he shall have a clear understanding of its place and purpose in the scheme of education. The fundamental question, "Why are you doing it?" will go far to vitalize the instruction and determine both content and method in any subject.

Pedagogy vs. logic. The following quotation from the high school manual of the State of Ohio calls attention to another vital consideration:

"Another new principle is that which asserts that subject values and teaching methods must be tested in terms of the law of learning and the application of knowledge to the activities of life, rather than primarily in terms of the demands of any subject as a logically organized science. There has been entirely too much worship of branches of knowledge by teachers who have specialized in them,—a worship that subordinates psychology, pedagogy and life uses to the strict regimen of logical arrangement of subject matter. Thus we have had history built up almost exclusively on a chronological basis; we have had algebra and geometry kept distinctly separated because each was a beautiful schematic entity in the eyes of its proponents and expounders; and we have had the natural sciences kept vague and experimental and relatively uncontaminated by practical applications. Quite happily, we have emerged from this state, but it is recent enough to need pointing out. The demand has now become fairly universal that, in arranging subject matter for learning, attention be given to considerations of economy in learning and effective control of subject matter rather than to 'logic' Fully developed, this means that materials of instruction should be offered in connection with the solving of problems and the execution of projects in fields where the pupils already have both knowledge and interest, traditional and conventional organization to the contrary notwithstanding."

Three valuable contributions of recent educational scholarship deserve special attention.

1. *Supervised or directed study.* The formation of correct mental habits is of greater importance than the accumulation of specific knowledge. After school days are over, pupils will render service largely in proportion to their ability to perform their alloted tasks independently. It is, therefore, important that they shall be taught how to solve problems. The following quotation from Alfred L. Hall-Quest defines supervised study:

"Supervised study is that plan of school procedure whereby each pupil is so adequately instructed and directed in the methods of studying and thinking that his daily preparation will progress under conditions most favorable to a

hygienic, economical, and self-reliant career of intellectual endeavor. It seeks to prepare pupils not simply for high school graduation or courses in higher education, but to an even greater extent for successful coping with problems in a world of intense competition, where superior achievement depends on initiative, clear thinking, and confidence in one's ability to organize experience for new adjustments. What is aimed at in supervised study is an individual who is trained to attack problems, and to organize his experience into large controlling concepts, and who, moreover, has acquired ability to initiate or to serve without merely doing what he is told to do."

No definite division of the period can be followed in daily practice; the demands of each day's lesson should determine the division. Each sixty-minute period, however, should usually be divided between: first, the recitation (review) or socialized presentation of yesterday's lesson; second, a carefully planned and definite assignment of today's lesson; third, the silent study, under direction, of today's lesson.

The recitation or review of the preceding lesson should rarely exceed one-third of the period. The chief aim in planning the time schedule of each lesson should be to secure the maximum amount of time for silent study when the teacher coöperatively works with the whole class or directs individual study. The attitude of the teacher becomes not so much that of imparting information as of developing right habits of study. The chief responsibilities are: organization of the review to economize time, clear assignment of the lesson to secure interested and intelligent study by the pupils, and unobstrusive supervision of the silent study to establish right habits of concentration in study. The whole period, not merely the silent study, should be interpreted as supervised study. The high school should set up as the standard of classroom methods the principle that teaching is instruction in learning. This principle recognizes the psychology of adolescence—the impulse to self-activity, self-expression, and self-revelation.

Where articulation with an established high school time schedule of forty or forty-five minutes is necessary, the number and length of periods must be at least initially controlled by present local conditions. In some cases a beginning can be made and the applicability of the plan can be at least partially tested by lengthening one or two of the regular periods to sixty minutes or more.

2. *The socialized recitation.* The activity most common in the ordinary classroom is the recitation of the substance of the textbook in response to the teacher's questions. Its concomitant is the assignment of "the next six pages" and its result at best a phonographic record of the textbook. The socialized recitation, on the other hand, requires the coöperative activity of the class group under the direction of the teacher. It establishes a standard of class interest, ac-

tivity, and achievement, and focalizes the dynamic powers of the class upon a worth-while task. "As the great defect of the ordinary recitation is the preponderance of the teacher, the socialized recitation aims to magnify the importance of pupil-activity. The monopolizing teacher is replaced by the activity of the group." (Robbins, "The Socialized Recitation," page 22).

A socialized recitation is not achieved by placing a pupil in the teacher's position as a conductor of the recitation. This is merely an exchange in the old formal type of recitation. A socialized recitation means participation by all naturally and spontaneously. "The coöperative pursuit of common purposes is used as a means of removing the lifelessness of the recitation of the cut-and-dried variety." Pupils must be willing to undertake assignments, to search for data and materials, to participate by question or answer when actually able to contribute, to avoid officiousness and over-eagerness to monopolize time, to cultivate an attitude of coöperation, to respect the rights of others in participation, to accept criticism gracefully and to offer criticism helpfully.

The teacher does not abrogate leadership. Supervision and direction of pupils' activities do not replace but comprise the teacher's leadership. The teacher becomes a student in diagnosis of pupils' powers, and in the problems of class work; a guide in the activities of pupils as the chief participants in the recitation; a counselor in their efforts to develop dormant abilities: a judge to determine progress; a leader to assign coöperative tasks, and finally a social agent to socialize children—the purpose for which schools in a democracy exist. These functions add dignity and effectiveness to the work of the teacher. His function ceases to be merely to impart information; he becomes a leader of other, though younger, social agents. The classroom, for teacher and pupils, becomes an actual experience in coöperation and socialization.

No school or teacher should undertake the socialized recitation without first making a thorough study of its purpose, its dangers, and the necessity of adapting its varied forms of organization to subject, to pupils, and to changing conditions of classroom work. The socialized recitation involves a change of attitude toward mutual responsibilities by both teachers and pupils. It requires a new spirit of coöperation between teacher and pupils and between pupils. For the teacher there should be a preparatory period of study of its purposes. For the pupils there should be a preparatory stage of training in the power to participate. The socialized recitation actually means socializing children through the recitation. As school socialization, in the large, must be the reflection of the personality of the

school as a social unit of pupils and faculty; equally so, the socialized recitation must be the reflection of the personal powers and social coöperation of the pupils and teacher in each class.

3. *The project method.* Much recent discussion and argument have centered around the so-called "project method". Without entering the controversy, it is safe to emphasize certain values that can be found in the use of this method and the application of the principles it involves.

Doctor William H. Kilpatrick of Teachers College* calls attention to the fact that this method is not a new discovery so much as an emphasis upon a "purposeful act", involving "whole-hearted, vigorous activity". "It provides for the adequate utilization of the laws of learning, and no less for the essential elements of the ethical quality of conduct. The last named looks of course to the social situation as well as to the individual attitude".

Enlisting self-activity. The project method aims to change the attitude of mind with which pupils approach school work by enlisting their initiative under the teacher's guidance in deciding, first, what problem is worth their attention at a given time; second, in determining the method of attack; third, in working at the solution of the problem; and fourth, in judging the results. Like the participation of pupils in the school government it makes the teacher a leader rather than a driver without in any way diminishing his authority or his influence. Instead of simply responding to the teacher's direction, the pupil in individual projects and the group in coöperative projects becomes self-active.

Educating for democracy. One of the first advantages of this plan is that it develops habits appropriate to citizenship in a democracy. This in the last analysis is the purpose of the American public school. Citizenship in a despotism calls for habits of an entirely different type, not unlike those described by Doctor Kilpatrick in discussing the position of the serf or the slave. In this connection Doctor Kilpatrick says: "These poor unfortunates must in the interest of the overmastering system be habituated to act with a minimum of their own purposing and with a maximum of servile acceptance of others' purposes. In important matters they merely follow plans handed down to them from above, and execute these according to prescribed directions. For them another carries responsibility and upon the results of their labor another passes judgment. No such plan as that here advocated would produce the kind of docility required for their hopeless fate. But it is a democracy which we con-

*William H. Kilpatrick—"The Project Method"—Teachers College Record, Vol. XIX, No. 4.

template and with which we are here concerned." In the interest of this democracy the habits of self directed activity, helpful and satisfactory group standards, and the habit of conformance with these group standards is of the first importance.

Developing mental habits. Any discussion of instruction must give prime consideration to the development of correct mental habits. The ordinary set re-citation of the textbook can hardly be expected to develop habits which will necessarily tend to make the young person "do better those desirable things he is going to do anyway". In few cases will he be called upon to follow any such process as mere restatement from a book. He will be called upon to recognize problems, solve them, and then to undertake new projects of his own, to work with others on projects demanding coöperation, contributing his share and profiting by the activities of his fellows.

Moral training. On the topic of moral training Doctor Kilpatrick says—

"The richness of life is seen upon reflection to depend, in large measure, at least, upon the tendency of what one does to suggest and prepare for succeeding activities. Any activity—beyond the barest physical wants—which does not thus 'lead on' becomes in time stale and flat. Such 'leading on' means that the individual has been modified so that he sees what he did not see or does what before he could not do. But this is exactly to say that the activity has had an educative effect. Not to elaborate the argument, we may assert that the richness of life depends exactly on its tendency to lead on to other like fruitful activity; that the degree of this tendency consists exactly in the educative effect of the activity involved; and that we may therefore take as the criterion of the value of any activity—whether intentionally educative or not—its tendency directly or indirectly to lead the individual and others whom he touches on to other like fruitful activity . . . . . We contemplate no scheme of subordination of teacher or school to childish whim; but we do mean that any plan of educational procedure which does not aim consciously and insistently at securing and utilizing vigorous purposing on the part of the pupils is founded essentially on an ineffective and unfruitful basis. Nor is the quest for desirable purposes hopeless. There is no necessary conflict in kind between the social demands and the child's interests. Our whole fabric of institutional life grew out of human interests. The path of the race is here a possible path for the individual. There is no normal boy but has already many socially desirable interests and is capable of many more. It is the special duty and opportunity of the teacher to guide the pupil through his present interests and achievement into the wider interests and achievement demanded by the wider social life of the older world".

Supervision. In securing good class-room work nothing is more important than effective supervision. The principal, head of department, or superintendent who after visiting a class can show the teacher how to teach better is increasing many fold the efficiency of the school and its returns to the community. To do this he must have a clear understanding of the aims of the various subjects, a mastery of the technique of teaching, and a degree of tact and of

human sympathy that will enable him to advise the teacher as a helpful friend rather than as an official critic. Such a supervisor will endeavor to accomplish his ends largely by constructive suggestions rather than by petty criticisms. Many of the faults of technique mentioned below will disappear once the teacher grasps the fundamental aims of the subject and begins to study his own daily practices.

The aim of instruction. The first objective of the supervisor should be to make sure that each teacher has a clear conception of the purpose of his particular subject. The tendency is to accept the textbook as an authoritative exposition of a subject and to "teach the book" with little discrimination as to the relative value of various parts of the subject or of the contribution of the subject to the lives of the pupils or of the communities in which they are to live. This attitude on the part of the teacher tends to crystallization. After the subject has been presented to a few successive classes a certain set of questions and a few formal and stereotyped explanations become habitual. A concomitant of such teaching is the assignment of "the next six pages," the painful question-and-answer re-citation, and the endurance-test attitude of mind on the part of the pupils, which leads to elimination of many of the most dynamic young people and to the acceptance of the school by others as a sort of necessary limitation of youth quite remote from their real instincts and interests.

A keen appreciation by the teacher of the aims of the subject and of its vital contribution to the lives of the young people and their communities will do more than anything else to prevent this calamitous condition. The constant effort to interpret these aims to the pupils and so to emphasize the most vital aspects of the subject as to arouse interest and insure permanent life values apart from the mastery of the book, which in most cases is largely evanescent, marks the difference between the live and the dead teacher. The teacher who asks himself every day, "Why am I teaching this subject? Why do I use this textbook? What are my pupils to get out of the day's lesson? Why do I ask this question or assign this topic?" is pretty sure to be one of the most popular teachers in the school even if he is the most exacting in his insistence on thorough work. In so far as he has a sane estimate of his aims, his point of view will insure purposeful assignments, proper emphasis in the class period, and helpful self-criticism of his results.

The supervisor of instruction will have no difficulty in recognizing this purposeful discrimination on the part of the teacher. Even if he is not a specialist in the subject, a principal who has a sound educational philosophy and an understanding of the principles of teaching will recognize the superiority of such an instructor. The principal can not be a specialist in all subjects. He should have an

understanding of the purposes of the various subjects and of the general principles of good teaching. He will, therefore, judge the quality of the instruction under his supervision on these general principles and make his constructive suggestions so as to help his teachers to a better application of the purposes of instruction and the laws of teaching. Not infrequently will a principal having these qualifications prove vitally helpful to a specialist who has superior knowledge of the subject matter.

Some definite criteria. One of the most helpful criteria of class instruction is found in the answer to the question, "How many people in this class are working?" On this basis the painful dialogue between the teacher and one pupil, while the rest are either pursuing entirely independent lines of thinking or dreaming, or trying to figure out whether they are likely to escape being operated upon this period, becomes a subject for conference and suggestion. The project method and the socialized recitation, involving as they inevitably do a considerable use of the topical recitation followed by the questions and the criticism and approval of the class, is the best preventive for the individualized dialogue. All such plans, however, must be adaptations rather than the formal adoption of official prescriptions. Sometimes dialogues are necessary; sometimes so-called socialized recitations ramble into confused wildernesses; sometimes topical recitations are tedious recitals of undigested irrelevancies. The success of a recitation depends upon the adaptation of the method to the purpose, the material, and the class.

No fault of class-room method is more common than that of the teacher talking too much. Many teachers are not satisfied until they have asked a question in a half dozen ways. Pupils are set guessing not what is important in the subject but what particular form of expression is in the teacher's mind, and precious moments are consumed by the exposition. The often halting explanation of a pupil is interrupted in the teacher's anxiety to have a particular form of presentation offered. The result is that many teachers, not infrequently those of long experience, smother their pupils with their own verbal barrage. A teacher who has fallen into this bad habit can frequently be shown his error by the simple device of an actual test of the relative amount of time he consumes as shown by a chart for ten consecutive minutes, which might show up something as follows:

	1st minute	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	Total seconds
Teacher	60 sec.	55	60	30	50	60	60	40	60	60	535
Pupil	0	5	0	30	10	0	0	20	0	0	65

The tendency to talk too much is probably the one most insidious and persistent fault of class-room practice. A large percentage of teachers would improve their instruction by obeying the admonition printed on a card and kept constantly before them, "*DON'T TALK TOO MUCH.*"

It is amazing how frequently even experienced teachers grow negligent in certain matters of detail concerning which principles are well established and generally known. For example, a seating chart should be made at the beginning of each term so that the daily roll call of the class may occupy only three or four seconds. Details such as the distribution of supplies, the return of written papers, etc., should be so systematized as to occupy seconds rather than minutes. Questions or topics should be announced before the name of a pupil is called; otherwise only the pupil named will give close attention. Pupils should never be called on in rotation. Questions or topics should not be repeated for the benefit of inattentive pupils. Concert recitations are futile because no one in particular is held to account. Too great dependence upon volunteer recitations removes responsibility from many individuals, as does a tendency to call on only a few of the brighter pupils. The repetition of the pupil's answers by the teacher is a waste of time if the teacher insists that answers be spoken so that all can hear. The list might easily be extended. The teacher who is intelligently trying to improve will make a conscious effort to check up his daily practice by applying such cautions as are given in such a book as Hughes' "Mistakes in Teaching."

Supervisory devices. Obviously no supervising officer can do more than to set definite aims and principles before his teachers and then endeavor to help them in the pursuit of the aims and the application of the principles. Frequent class visitation followed by conferences with the teacher is the most effective means of improving teachers in service. Coupled with this, however, should be a definite presentation of aims and principles. The teachers' meeting affords perhaps the most valuable opportunity for this instruction. The faculty that is actively studying some problem like the socialized recitation, the project method, or supervised study under some such plan as is suggested in the chapter on school activities in this manual is pretty sure to improve in its daily work. The attitude of mind favors intelligent scrutiny of aims, content, and methods of instruction, and the beneficial results extend much beyond the limits of faculty discussion. The principal who arouses in his teachers a dissatisfaction with their habits of instruction and an earnest effort for improvement is a real leader.

Attendance upon summer sessions, extension courses, and systematic reading can do much to prevent or overcome the tendency for a teacher to be satisfied with habitual methods that have become stereotyped and easy. The wise supervisor of instruction will inspire and encourage his teachers in the use of all these devices for improvement.

IX. STUDENT AND FACULTY ACTIVITIES

The Underlying Philosophy

Citizenship the first aim of the high school. The success of our democratic government and social order depends upon the intelligence, the conscience, and the skill with which the great mass of our people attack our political, social, and economic problems. The public high school is the one institution through which society can most directly and purposefully attack the problem of developing the qualities essential to successful democracy. It is owned and run by society; it is open on equal terms to all the children of all the people; it has under its daily influence the group from which will come nearly all the leaders of thought and sentiment in the coming generation; and perhaps most important of all—it has them at the time when they are more responsive to social appeals than at any other period of their lives.

Clearly the first duty of the high school is to make its charges intelligent concerning the history, the philosophy, and the problems of democracy. It must enlist the personal devotion of our young people to the welfare of democracy, at once by showing them how inextricably their own happiness is involved in this welfare, and by appealing to their idealism, dominant in adolescence as at no other period. As the enacting clause of its instruction and of its emotional and ethical appeals it must train in those skills that shall make the knowledge and devotion dynamic in producing a better democratic social order.

The high school has an unparalleled opportunity to develop this devotion and these skills. Its problems are real—not make-believe; the welfare of the group depends upon coöperation and demands the subordination of individual to group interests; the responsibility and authority of the group must be delegated to leaders; indeed, the success of the school depends upon a high standard of intelligence, conscience, and skill in solving the problems of the school community.

The purpose of democratic coöperation. It can not be too strongly emphasized that the purpose of democratic coöperation in solving school problems is not merely either discipline or better management of details. There is scant evidence that democracy is more efficient than is despotism at its best. The advantages of democracy are largely spiritual, and the beneficent results of democratic school administration are to be found in habits of thought, feeling, and action rather than in mere conformity to rules. However efficient its organization and its instruction in mere subject matter, the American high school fails in its most important function if it fails to develop the qualities of good democratic citizenship.

Student participation in school government. When we apply this philosophy, we must give the student activities of the school a place of prime importance. The first and perhaps the most important activity is student participation in the government of the school. The specific form of organization and the details of administration are relatively unimportant. The clarity of the purpose in the minds of both school authorities and student body and the spirit of devotion to the ideals of democracy will determine its success.

Pyramid of responsibilities. At the outset everyone involved should clearly understand that the legally constituted authorities of the school do not resign an iota of power or responsibility. The people elect a board of school directors who in turn elect a superintendent, a principal, and teachers. Responsibility for conducting the school rests upon these professional servants of the public. If they can train for citizenship better by sharing their responsibilities, they may share them; they have no legal or moral right to surrender them. The superintendent, the principal, and the teacher, therefore, each in his appropriate sphere, should always stand ready to reclaim any delegated authority and to veto any action of the student organization.

Gradual introduction of student participation. The honored principle of learning to do by doing applies in student participation in the management of a school. While the fundamental principles already set forth should be clearly understood, it is probably better to proceed slowly with their application. After a fine spirit of loyalty to the school as a coöperative community has been established, the challenge—"Can the student body do this for the school?" will meet with hearty and well-intentioned response. Even then, much skillful guidance is necessary. Success in a small effort such as the management of a student assembly or the orderly conduct of the corridors under student direction marks much greater progress than an elaborate organization with a formal constitution, by-laws, and officers. The moment of assured success is the time for increased responsibility. Organization should come in response to an evident need rather than in anticipation of a possible use. In this way the public opinion and sentiment of the school grows with the movement and makes its success inevitable. In the democracy of a school as of a state, public opinion is the court of last resort. In a school it may become so well unified and so directly potent that few will care to go counter to its mandates.

Dangers. One of the first dangers of a school democracy is the development of too strong partizanship and its incidental bossism. The worst form of this partizanship is found when the cleavage appears along racial or sectarian lines. A school democracy can hardly

survive a persistent cleavage of this kind, and the alternative of the abandonment of this type of partizanship or of the experiment in student participation should be frankly faced.

The danger of apathy or lack of interest is less serious than in the democracy of a state. Its appearance is generally an indication of-over-organization. The danger of pupils' assuming too great authority will not be likely to arise if there is a clear understanding of the principles discussed above under the heading of *The Pyramid of responsibilities*. A very real complaint may come from the pupils if the student organization appears to be only a clever device for carrying out the adroit suggestions of the principal. Genuine student participation will be fertile in the initiation of really helpful measures that often do not occur to the best professional minds.

By-products. Among the salutary results of successful student participation comes a complete change in the traditional relationships of students and faculty. With the assumption of police responsibilities by the students, the cordial and natural relationship of teacher and pupils are promoted. In the interest of a larger and better democracy probably no result is so valuable as the training of leaders. Many a principal has been amazed to see the student leader command an enthusiastic loyalty to a principle or measure that would have met a cold reception if presented by the official himself. Problems of discipline under successful student participation are prevented rather than solved. The real reason, however, for any such system lies in the development of the intelligence, the conscience, and the skill appropriate to a democratic social order that must result if the scheme is a success.

Democratizing the faculty. Democratic school organization for the students logically carries with it democratic organization for the faculty. Again without surrendering any official prerogative, the principal develops coöperation, initiative, and responsiblity on the part of his faculty. He delegates functions which he thereafter touches only through his appointee. Without "going to sleep at the switch" he makes sure that the train takes the right track; at the same time he never touches the lever personally. Thus by enlisting all of the best intellectual and spiritual energies of a group of highly educated people, we prove again that the whole is greater than any of its parts. Lack of this coöperation in many schools makes the whole much less than the sum of its parts.

The principal. In all this the principal must be the leader and inspirer. If he lacks vision, sympathy, personality, or patriotism any scheme of democratization will probably be futile. No scheme of student participation will succeed without the loyalty and enthusiasm

of the faculty and the student body, and these qualities are not likely to be commanded by a principal who could not run an efficient school of the benevolent despotism type. The plan is recommended not because it will save work although it will remove many disagreeable duties. Its value, however, lies in developing in the youth of our democracy the understanding, the conscience, and the skill essential to the well-being of our social order.

Other school activities. A thoroughly democratized school will teem with social activities. In addition to the usual school paper, orchestra and athletics it will have many clubs devoted to all sorts of interests—literary, dramatic, artistic, scientific, scouting, mathematical, political, social, etc., as listed on page 111.

The following outline is given as a suggestion that may be helpful in further developing this valuable phase of school service.

An outline for school activities.

Guiding Principles:

1. The spirit of the school largely determines its efficiency as a social institution.

2. A school activities period provides a *controlled environment* for the development and expression of a dynamic spirit of loyalty to community interests. All school activities should be controlled by faculty participation and coöperation.

3. The development of individual and group idealism depends upon the attractiveness of the ideals when presented and the opportunities afforded for them to become established in habits and skills.

4. The American public school must develop the intellectual and emotional habits and the skill in coöperative activity essential to a democracy if our democratic government and social order are to endure.

A School Creed: To train for democracy the school must be a democracy.

A School Slogan: Do-in-coöperation.

Organized activities essential.

The Department strongly favors the organization of school activities and the gradual introduction of student participation in the administration and discipline of the secondary schools for the definite purpose of training in the principles and practices of democracy.

School activities are included as an integral part of the program of studies for all junior high schools as one of the requirements for classification. Each junior high school should, therefore, plan for

some school activities in connection with the original organization of the school. This program is planned for junior high schools, senior high schools, or six-year high schools.

It is therefore requested that forms of organization which have been successfully carried out, and also criticisms and suggestions of the present tentative outline, and particularly adaptions of the program to small schools be reported to the Department. It is the purpose of the Department to be helpful to all schools in the fullest possible measure and to act as a clearing house for the state-wide publicity of successful experiments in school socialization and school activities carried on in widely separated parts of the State.

The School Activities Period

The daily program. At least a six-hour school day, with six clock-hour periods is recommended where such an organization is possible. This arrangement is not essential as a basis for the introduction of an activities period. Four of these periods are devoted generally to the four major studies (1) English (2) mathematics, (3) social studies, (4) science and geography. Students taking a foreign language will generally take less than a full four-year course in mathematics and science. A fifth period is devoted to fine and practical arts and guidance. The sixth period should be divided into a fifteen-minute period for devotional exercises at the beginning of the morning session and a forty-five minute period for organized school activities. Some schools are providing a devotional exercise period from 8:45 to 9:00 o'clock with three one-hour periods from 9:00 to 12:00 and three from 1:00 to 4:00. Particularly the smaller rural and township schools will find this advisable.

1. *Time allotment adapted to size of school.* In smaller schools the sixth period may be required in part for the practical working out of the daily roster of the curricular requirements. There should be no hesitation in using the sixth period for this purpose in the small school of four to six or eight teachers; it is a concession to practical necessity.

The minimum time allotment for school activities in any school should be two periods a week. On the other three days of the week the sixth period may be used for additional time in spelling, penmanship, music, art, practical arts, coaching, or other special activities in the program of studies. A typical daily program for a four-teacher junior high school, including seventh to tenth years, will be sent upon request to the Department.

For schools having fewer than twenty teachers the maximum time should rarely exceed three periods, particularly at the inauguration of the plan of a school activities period. The maximum allotment for

the large school of over twenty teachers, after a year or two of development, should approximate five periods a week. No school, medium or large in size, should hesitate to extend the time allotment for activities when it is evident that such activities have actual educational value and will not cause a sacrifice in regular curricular requirements.

2. *Home-room period.* Each school should inaugurate its activities with a home-room period. It is vital that each class be assigned to a definite home room under the direction of a member of the teaching staff who becomes the home-room counselor. Members of the faculty not so assigned should be designated as associate home-room counselors to act as coöperative agents with the home-room teachers. In addition to the brief daily contact of home-room class and teacher, one activities period a week should be set aside when pupils and teachers may meet as a home-room unit.

Administrative routine work (absences, reports, etc.) should consume only a minimum of the weekly home-room period. The maximum time of the period should be devoted to the work of the home-room teacher as the class counselor, particularly in guidance. Constant diligence must be exercised to prevent absorption of the time by administrative routine. Definite planning for the activities suggested in the outline below will assure the realization of the greater purpose which is the only justification of a weekly home-room period.

A guidance period once a week is suggested in the first two years of the junior high school program of studies. This guidance should include educational and vocational information. It is class-room instruction. On the other hand, the guidance of the home-room period is more personal; almost wholly administrative in purpose. It is personal direction to assure that guidance becomes individual. It further extends guidance to matters of a social and moral nature which are concerns of the home-room group. This distinction between informational guidance for the class and personal guidance for the individual in the home room can apply always in the larger schools. In the smaller schools the home-room guidance may necessarily have to include both types of guidance, particularly when guidance periods and home-room periods can not both be provided in the weekly roster.

3. *Coöperative pupil government.* When pupil participation in school government is inaugurated, the home room should become the initial unit. The class officers, elected by the class, should participate in class control and in the home-room activities under the guidance of the home-room teacher. This preliminary training in pupil coöperative government in the small, closely supervised class unit is imperative in preparation for participation in the larger democracy of the entire school.

The federation of home-room classes into an organized school community should be deferred until the class-unit participation has become established. The federation of all classes into a school community, with its pupil council, committees of pupils for general school control, e. g., lunch room, playground, corridors, assemblies, etc., should come as a natural and logical outgrowth of the demonstrated power of the pupil democracy to expand from the home-room or local coöperative government to the school community or federated coöperative government. The latter is ultimately desirable, but the former is initially fundamental. There is a natural sequence in the training of pupils to participate in school control which can not be disregarded without serious risk of overloading untrained adolescent youth with responsibilities beyond its powers.

Small schools devoting only two periods to activities should alternate the home-room activities (See home-room period below) with class meetings (See pupil coöperative government below). Larger schools should, in time, provide a separate period for each of the two activities as suggested in the following outlines.

4. *School assemblies and clubs.* The second period in the minimum organization of school activities should be devoted to assemblies and clubs. Small schools should alternate the two (See assembly and clubs in outline below). Schools of medium size, between six or eight and twenty teachers, should adopt some plan of alternating activities as suggested in the summary immediately following. Larger schools, with twenty or more teachers, should gradually develop a daily period for school activities.

All schools should provide assembly programs from the beginning and should include clubs in the organized activities program as soon as clubs have developed to the extent of including the majority of the pupils. Prior to this time, clubs will accompany the development of other school activities as extra-curricular and after-school activities. When the pupils request a club organization for all, and when teachers are prepared voluntarily to undertake club leadership, clubs should become part of the weekly school roster. Each pupil, then, should be required to elect one club annually or semi-annually.

5. ***Summary of time allotment:***

a. Small schools (Four to eight teachers)
Two periods:

(1) Home-room period and class meetings alternating
(2) Assemblies and clubs alternating

b. Medium size schools (Six or eight to twenty teachers)

Three periods:

First Week	Second Week
(1) Home-room period	(1) Home-room period
(2) Assembly	(2) Class meeting
(3) Clubs	(3) Clubs
Third Week	**Fourth Week**
(1) Home-room period	(1) Class meeting
(2) Assembly	(2) Assembly
(3) Clubs	(3) Clubs

c. Large schools (Twenty or more teachers)
Five periods:
(1) Home-room period
(2) Cooperative pupil government (Class meetings)
(3) Assemblies
(4) Clubs
(5) Faculty activities (See complete outline)

Adaptation. An imperative need.

Small schools should select from Part III of this outline such suggested activities as are best adapted to their facilities, their shorter time allotment, the needs and abilities of pupils, and the experience and capacities of teachers with their comparatively heavier classroom duties.

All schools should accept the following outline as purely suggestive. It will be a serious error to adopt, without modification, any formal plan. School activities in each school should reflect the personality of the pupil-body, the faculty, and the organized school community. Democratic participation is the outward expression of the internal social life of each school. Therefore, the best organization in operation elsewhere may not be adapted to the needs of a particular school.

Faculty Activities Period

The need of professional study. There is peculiar need for professional study by all high school teachers. In junior high schools, for example, there are few teachers today who were, prior to their service, specifically trained for junior high school work. It is particularly true of the junior high school that its teachers are trained through service. While the junior high school is in the experimental stage, it demands constant professional alertness on the part of all participating in its evolution. Furthermore, the problems of reconstruction in organization, program of studies, courses of study, socialization, and general administration are beyond the powers of any one leader or administrative group in any one school. Coöperation of the faculty in all junior high school problems is, therefore, an imperative need.

The rapid readjustment of secondary education to the changing concepts of its fundamental purposes makes a similar study equally essential for principals and teachers of senior high schools. Consequently it is earnesly urged that all high school faculties, both junior and senior, small and large, undertake some professional study as a local group. In a six-hour school day, this faculty activity should not be organized as an after-school program. It demands a degree of enthusiasm and earnestness impossible to exhausted physical and mental conditions following a long school day.

It is recommended that once a week in schools with six-hour daily schedules pupils be dismissed for the last morning period and that the time for professional study be taken from school hours.

In the small schools, where practical arts or fine arts are taught by part-time instructors, the regular teachers will be relieved of classroom control. This free time affords a most favorable opportunity for a faculty program in professional study. Other suggestions will be given in the outline below.

Cautions

The first and second days, etc., in the following outline have no significance as to the days of the week. The five days comprise a week's program. Suggestions are given above for alternating activities in small schools. Each school activities period should be placed on the day of the week and at the time of day best suited to the school. All activities periods should be part of the school day, particularly so when the school day equals or exceeds six clock hours exclusive of the luncheon period.

It will be noted that the following outline makes reference to three types of pupil-body meetings, viz: devotional or opening exercises, school community meetings, and assemblies. The first is the daily opening period of 10 to 15 minutes; the program usually includes scripture reading, singing, and announcements. No program of school activities should be permitted to replace this long-established practice.

The school community meeting is a monthly assembly of all homeroom classes as a federated school community under the immediate charge of pupil officers. The school assembly is a weekly program of 45 to 60 minutes in length under the charge of the assembly committee suggested in the following outline. In the small schools bimonthly school assemblies alternate with bimonthly club meetings. In all schools the usual opening exercise period may be extended into a 45 to 60 minute period for either the monthly school

community meeting or the weekly assembly. It may be advisable to omit the assembly period in the week when a pupils' community meeting is held.

A final word of caution. Extreme care must be exercised from the start that the development of any activity, at any stage of the progress, does not exceed the pupils' abilities to participate nor the teachers' experience to direct their own and the pupils' participations.

The purpose of this chapter will be wholly misunderstood if it is interpreted as a suggested organization to be adopted *in toto* in any school. The chief aim is to direct attention to the educational gains arising from properly motivated school activities. For this reason no attempt to inaugurate an activities program should be made until the objectives as set forth in Part 1 of this chapter are accepted fully in principle by both faculty and student body. Any form of organization should, therefore, be preceded by two preliminary stages: first, a study by the faculty of the objectives of school activities, i. e., definite aims which will inspire enthusiasm; second, a study of the local needs and opportunities for pupil participation which, because of their genuineness, will inspire respect. Only when these two stages have been passed will it be safe or wise to undertake organization. Two cautions should be scrupulously observed in all stages of organization. First, organization must be adapted to local conditions. Variation from the organization suggested in Part III is both desirable and necessary if socialization of each school is a true reflection of its social life. Second, organization should proceed one step at a time. The success of each activity should be assured before another is attempted. A complete organization should be a gradual development extending over a period of two or more years.

When school activities have degenerated into ceremonial form, they have become hollow shams as an agency to create school morale, to train pupils effectively in social coöperation and citizenship, or to develop the personal powers of initiative and leadership. When school activities cease to inspire the enthusiastic support of faculty and pupils, the activities should be reenlivened, replaced, or abandoned. The need for periodical stimulus is charateristic of any organization. These periods are the critical stages of school activities. They must be anticipated by as purposeful efforts as will attend the initial stages of organization. It will be noted that in Part III provisions are suggested to the end of maintaining interest and enthusiasm in the actual operation of school activities.

THE SCHOOL ACTIVITIES PERIOD—A SUGGESTED OUTLINE

First Day—Home-Room Period

1. *Leadership.* Home-room and associate home-room counselors—pupils as appointed by counselors or by the class.
   Participants: Teachers and pupils.

2. *Activities.*
   a. Records of attendance. Administrative reports.
   b. Announcements of school activities and communications to pupils from principal or faculty members.
   c. Arrangements for class participation in school campaigns and other general school activities.
   d. Coöperation with subject teachers in matters of school work and deportment.
   e. Creation and maintenance of class standards in classroom work, home-room and school service, conduct, courtesy, and loyalty.
   f. Guidance by home-room and associate home-room counselors. Stimulation of class and pupil participation in all guidance activities. Freedom for personal questions of pupils. Discussion of subject electives in their significance to the individual. Personal and social guidance. Encouragement of an atmosphere of understanding and sympathy.
   g. School banking under pupil management, with close faculty supervision.

3. *Suggestions.*
   a. Many interruptions to classroom time, by way of notices, etc., may be avoided by using this period for a weekly opportunity to make announcement.
   b. Exclusive administrative routine in this period will produce an attitude of apathy which will defeat the greater aims of the period.
   c. The associate home-room counselor should be invited to share in the program of the period and occasionally to take charge of the program.
   d. The counselor must be convinced that no greater service to the pupils is possible than in this activities period. The secret of the effectiveness of the home-room period lies in the counselor's enthusiasm for its opportunities. A set program of formal routine, any other line of least resistance, or indifference of any nature will defeat every objective of the period.

Second Day—Coöperative Pupil Government

1. *Leadership.* Class officers

2. *Participants.* Members of the home-room class. Counselor and associate non-participating advisers.

3. *Activities.*
   a. Home-room class unit under direction of home-room teacher. Election of class officers to hold office at option of school for a semester or a year.
   b. Federation of class units in a socialized school community.

      (1) *First bimonthly class meeting.* Short bimonthly business meeting conducted under parliamentary law. Motions affecting class or school interests, discussion, and action by vote. Formalities of parliamentary practice observed for concrete lessons in established law and order and the rule of the majority.
      A program committee of pupils should be appointed by the president. Following the short business meeting, the chairman of the program committee should preside. The committee, with the guidance of the home-room counselor, should arrange a class program ten days in advance and make appointments for pupil participation. Program topics should be common to all classes, irrespective of grades, and should be articulated with auditorium programs; e. g., school campaigns, thrift program, "Better English" program, review of current events, dramatization, guidance program, etc. The appeal of the assembly program is to the coöperative support of the pupil body. The appeal of the class program is to coöperative participation by the members of the class.

      (2) *Monthly group meeting of class officers.* Officers holding the same office in the class units should be organized into a group; viz., a cabinet of presidents,, a council of vice-presidents, etc. Each group should elect its own presiding officer, secretary, etc. By virtue of the election in this small group, the presiding officer of the presidents should become the school-community president; the presiding officer of the secretary-treasurers, the school-community secretary-treasurer, etc.
      Each group should be under the guidance of a faculty-director, the principal acting as faculty director of the cabinet of presidents and appointing faculty directors for other groups. There should be instruction in the

duties of the office by the faculty director. Problems confronting any or all of the officers should be frankly discussed. Opportunity should be offered for any officer to present methods of improving the service either actually tried out or proposed. The group meetings provide to coöperative pupil government the opportunity for a progressive development in modifications of practice as suggested by experience, and in further development of the service given by each group.

When the officers are in session, the non-officer members of the class should be under the direction of the home-room teacher; the time may be used for guidance, conference with the home-room or subject teachers, study in the home room, chorus singing in the assembly, or any other activity including the non-officer pupils in part or in whole.

(3) *Second bimonthly class meeting.* This meeting is held in the week following the group meetings of class officers. The class president should preside. Each class officer should make a report of the proceedings of the respective group meetings—recommendations of the group officer, suggestions for improvement in coöperative pupil government, statement of pupil-officer duties, and plans for more effective coöperation of class members with pupil officers. Each class officer should review the month's record of the class in coöperative pupil government so far as compliance by the class in the functions of the respective class officer is concerned. The officer should recommend plans for improvement. Both commendation and criticism should be made. If need be the officer should appeal for class action by vote upon his suggestions. The second bimonthly class meeting is the monthly opportunity for the developing of a wholesome and enthusiastic support of the coöperative pupil government.

(4) *School community meeting.* There should be a monthly auditorium meeting of all home rooms under the charge of school-community officers. The presiding officers of the several groups and the faculty directors should form an executive committee with the principal as chairman to arrange programs. The presiding officer of the cabinet of class presidents should preside at the school-community meeting as the school-community president. There should be a formal installation of of-

ficers of the school-community officers, i. e., the presiding officers of the groups. The school-community president should address the pupil body at his installation; other officers should follow. These addresses should be appeals to the pupil body for loyalty and coöperative service and should give in clear detail the functions of the office which the speaker represents. School campaigns and general school projects may be most effectively launched at these school-community meetings. By the power of example, proficiency and ability will be developed in pupil leadership, upon which reliance may be safely placed for the effective inauguration of general school activities. There will be created in time a confidence in pupil leadership which will far exceed the most sanguine expectations of any faculty not experienced in this type of coöperative pupil participation and leadership in school activities.

(5) *Pupil council.* This may be composed of the home-room class presidents, or, in a large school, of the pupil chairmen of the groups of class officers. It should constitute an advisory body to the principal. Its functions should be to articulate the activities of the pupil body. Its reports and recommendations should be made in a school assembly.

(6) *School-community committees, bureaus, commissions,* etc. These may be determined by the needs of the school. Upperclassmen should generally be appointed or elected to membership. These organizations would include a staff for the school paper, and athletic committee of management, corridor traffic squad, current events bulletin board committee, playground control committee, lunchroom committee, bicycle-room committee, safety-first bureau, school sanitation committee, visitors' committee, and any other adaptation of outside community practice which can be helpful in school administration and contributory to pupil training.

Temporary committees should be appointed for the management of temporary activities, e. g., school campaigns, entertainments, athletic contests, social events, etc.

4. *Suggestion.* Leadership in the school community organization is properly restricted to older pupils. It is, therefore, limited to a comparative few. It is the culmination of coöperative pupil government. In some form it should exist in every school. Too

frequently, however, organization as a whole completely overshadows or replaces the more essential class-room participation. The vitue of the latter is its more fundamental nature and its opportunities for larger numbers to participate.

Third Day—School Assembly

1. *Leadership.* An assembly committee of the faculty including principal or administrative assistant, dramatics teacher, and a representative of the music department, as permanent personnel, together with other faculty members annually appointed by the principal, and pupil representatives appointed or elected annually.

2. *Participants.* Pupils of school. Occasionally, as necessity requires, members of the faculty, and rarely, as courtesy demands, outside speakers.

3. *Activities:*
   a. School campaigns and other general school activities launched in assemblies. Reports of progress and results.
   b. Demonstrations of class work in all subjects: Socialized recitations, supervised study lessons, guidance class work.
   c. Demonstrations of school activities. Class meetings, clubs, orchestra, staff of school paper, home-room class meetings, the school library.
   d. Participation in community, city, state, national or international welfare activities. Junior Red Cross activities. Modern health crusades.
   e. Observance of state and national holidays.
   f. School plays, written by pupils or adapted, short but regularly occuring dramatizations relating to school campaigns, the guidance program of the school, and other school projects.
   g. Visual instruction. Use of specimens, collections of pictures, lantern and moving picture apparatus operated if permissible and lectures given by pupils.
   h. Awards of school and other prizes, banners, etc., to individuals, to classes, or to school.

4. *Suggestions:*
   a. The school assembly should become the school forum where classes find social coherence; it should both originate and maintain the school spirit.
   b. Unity and loyalty. The class meetings, the group meetings, the club, and the school assembly should provide a natural growth from the consciousness of a class or group unity to the consciousness of a school unity and to the larger corporate unity of neighborhood, town, city, etc.

c. A spirit of service and sacrifice should permeate the whole school life by standards established in the assembly.

d. Pupils should sense a personal proprietorship in the assemblies. This can develop only as participation becomes practically their exclusive privilege. Latent powers in the many should not be sacrificed to the demonstrated powers of the few. The principal should set a democratic example by asking a member of the faculty or a pupil chairman to preside. An assembly program devoted to an address by the principal or visitor or to performances by "star" pupils, though occasionally unavoidable, is robbing adolescent youth of their right to training in public speaking, leadership, initiative, self-possession, executive powers, and coöperation with their associates.

Fourth Day—Clubs

1. *Leadership.* An "Executive Committee of Clubs" appointed by the principal, responsible for organization and adminstration of all club activities. A faculty club leader, appointed by the executive committee, responsible for activities of each club.

2. *Participants.* Pupils on a basis of voluntary choice of club, irrespective of grade, home room, or curriculum classification; faculty leader also on a basis of voluntary choice in club leadership, irrespective of classroom teaching. Pupil coöperative management of club activities under guidance of faculty leader. Club elections of pupils and faculty confirmed by executive committee; club management under administrative direction of committee.

3. *Activities.* Any activity with an avocational, a recreational, a social service, a civic, a moral, a vocational, or any other educational value in adolescent training. Any activity which will "teach pupils to do better the desirable activities that they will perform anyway". Any activity which will assure "so much of good to do that the bad can not creep in." Any activity in school hours which will replace the pursuit of a harmful outside activity. The substitution of a wholesome activity must accompany the denial of the gratification of an unwholesome activity. Any activity for the adolescent youth which has the sanction of accepted adult practice in avocational pursuits. Club activities for the adolescent age as varied as the non-vocational interests of adult life. The school club is both motivation and training for adult choice of leisure time occupation. Any activity which will train for the "worthy use of leisure", one of the seven main objectives of education is desirable.

Partial List of Clubs. Airplane, Athletic (Boys), Athletic (Girls), Basketry, Better Community, Bird, Bird House, Boys Series, Camera, Camp Craft, Campfire Girls, Cartooning, Chemistry, Crochet, Crop, Dairy, Debating, Dramatic, Embroidery, Ernest Thompson-Seton, Farm Craft, First Aid, Flower, Gardening, Folk Song and Dance, Forestry, Foreign Language, Handicraft, Home Beautification, Home Economics, Home Nursing, Illustrators, Junior Chamber of Commerce, Kipling, Kite, Knitting, Know Your City, Landscape Gardening, Laundry, Library, Live Stock, Machinists, Martha Washington, Masonry, Military, Millinery, Musical Appreciation, Mythology, Newspaper, Orchestra, Pottery, Poultry, Public Speaking, Puzzle Radio, Red Cross, Reporters, Santa Claus, Scrap Book, Senior Corps (Boys), Senior Corps (Girls), Short Story, Small Animal, Social Hour, Stamp, Story Telling, Success, Swimming (Boys), Swimming (Girls), Tatting, Travel and Exploration, Tree Management, Vegetable Gardening, Violin (Beginners), Violin (Intermediate), Violin (Advanced), Wood, Wild Animal, Wild Flower, Willing Workers, Wireless Builders.

4. *Suggestions:*

   a. *Scope of club list.* Two conditions determine the organization of any club: first, enough pupils interested in the club project to form the group, and second, a member of the faculty interested in the same project to act as club director. The club list given is suggestive only.

   b. *Club membership.* Since the club hour is part of the school day, membership in some club should be required of each pupil. For the same reason, club leadership as director or assistant director, or club administration should be required of practically every member of the faculty.

   c. *Functions of executive committee.* Organization of each club—assignment of members and appointment of faculty director.
   Administration of all clubs
   Supervision of all club activities
   Direction of club assemblies, faculty discussions, and annual club exhibit
   Preparation of club program—list of clubs with objectives, projects, and conditions of membership
   Presentation of program to faculty and pupil body
   Stimulation of club visits to civic and public welfare institutions, to industrial plants, and other field excursions.
   Direction of all club publicity.

Fifth Day—Faculty Activities

1. *Leadership.* Principal

2. *Participants.* Faculty

3. *Activities.*

   a. Demonstration of any classroom activity in English, foreign language, mathematics, social studies, science and geography, health, music, art, practical arts, commercial work, library instruction, guidance class work, etc.
   All pupils except those giving demonstrations should be dismissed during the faculty activities period.
   In all demonstrations the faculty should represent visitors to the classroom. If the seating capacity of the classroom is inadequate, the demonstration should be given in the assembly or another room with adequate seating for class and faculty.

   b. Demonstrations of supervised study and socialized recitations. Following the demonstration the class should be dismissed. Either after the dismissal of the class or a subsequent faculty meeting, an opportunity should be provided for a general discussion. The teacher in charge of the demonstration, the principal, a supervisor, or a director should lead the discussion. The principal should be in general charge of the program. He should, however, have a faculty program committee serve with him in organizing the program. He should frequently withdraw as presiding chairman and delegate this function to an associate. A suggestive program on supervised study will be submitted upon request.
   A series of demonstrations upon the same general topic should occasionally be arranged in a consecutive program, interspersed with papers, discussions, or informal talks. The program may be extended over a semester or a year.

   c. Demonstration of any school activity—a home-room class meeting, a pupil officer group meeting, a club meeting, etc. A presentation of the purpose should precede the demonstration. A general discussion with questions should follow.

   d. Faculty visits to given departments, e. g., a scheduled program of visits by groups of the faculty, on one occasion to an industrial arts department with all shops in session; on another occasion to a home economics department with sewing, cooking, millinery, laundry rooms, etc. in operation; to a commercial department with bookkeeping, commercial

mathematics, typewriting classes, etc. in session; to an English and foreign language department and to any other subject group department.

e. Faculty visits to single rooms by the subject teachers of the department, e. g., all science teachers visiting one science teacher and class, all shop instructors observing the work of one shop, etc. A series of simultaneous faculty visits in groups determined by the particular subject interest of the group.

f. Presentation to the faculty of any educational interest in the school by the individual in charge. Presentation of any educational interest common to all schools by city, borough, or county superintendent, or by a supervisor or director of any subject or department. Presentation of any civic or social interest with which the school is or should be affiliated by the chief executive officer or representative.

g. Conference of teachers by subject groups. The conference should be devoted to discussion of the courses of study, methods of instruction, classroom processes, lesson plans, equipment, etc.

h. Discussion of problems of organization and administration. The problem should be presented by the principal or by an associate. There should be free discussion. When the decision may be delegated, action in the proposed solution of the problem should be by majority vote. The faculty should usually be consulted in an advisory capacity.

i. Professional study. Programs should be prepared by principal, with administrative or supervisory associates or with a committee of the faculty. Each committee delegated with responsibility for the investigation and report of a sub-topic should be allowed freedom of initiative and conference as a committee. The chairman should make assignments for study and should determine the form and method of report to the faculty. The formal report to the faculty of each sub-committee's investigation should be under the direct charge of the committee, with the chairman as presiding officer of the faculty meeting. The report upon each subtopic should be followed by a general discussion of all members of the faculty.

The professional study may be undertaken as a university extension course. A large faculty may be registered as a university extension class. Two or more smaller faculties

may combine for the same purpose. The place and time of the meetings may then be determined at the convenience of the members. The registration for the class will be largely increased by reason of convenience of time and place to the members. It is suggested that the university instructor conduct the course, not on a lecture basis, but as indicated above on the basis of assignments, reports, and discussions. A suggestive program on guidance will be submitted on request. Other suggestive programs on the junior high school will also be submitted on request.

4. Suggestions.

a. *Type of meeting.* A faculty meeting should be a teachers' meeting, not an audience of teachers to be addressed by the principal or a speaker appointed by him. An occasional faculty meeting conducted solely by the principal is unavoidable.

b. *Democracy.* The democracy of the school should find its origin and maintenance in the faculty relationship, particularly in faculty meetings.

c. *Time.* The faculty activities period should be part of the school activities. It should be the closing period of the morning, including 45 to 60 minutes of school time. Meetings should be limited to one and a quarter hours; rarely should they equal or exceed one and a half hours, particularly in a weekly program of faculty meetings. In a six hour school day, a faculty meeting at the close of the day's session is seldom advisable. With the general adoption of a longer school day, other educational practices must submit to change.

d. *Personal study.* Teacher training may be inspired and directed by the lecture method, but it is achieved to a large extent by the personal study of teachers. The training that is carried over into practice in the classroom is the product of personal conviction coming from personal study.

e. *Pupils.* During the faculty activities period the pupils should be dismissed. Parental protest will be as rare as it always has been when pupils are dismissed for teachers' institutes. Where pupil activities involving a part or the whole of the pupil body can be safely intrusted to pupil direction during the faculty activities period, this experiment should be attempted. But all such plans should be tenta-

tive, subject to a careful determination of their actual educational value.

f. *Range of teacher contact with program of studies.* It frequently happens that departmental teaching results in a restricted and narrow vision on the part of subject teachers. There should, therefore, be a clear administrative purpose to acquaint all teachers with the work of the whole school. A complete democracy of faculty relationship and perfect freedom in the interchange of visits between teachers should exist. The faculty activities period provides the secondary school administrator with an opportunity to widen each teacher's range of contact with the whole program of studies.

g. *Routine notices to faculty.* The principal should insist that all notices of a routine nature, including his own administrative routine, should be mimeographed and distributed to the faculty by circular letter. Lacking the facilities for mimeographed circulars, notices and all other administrative details should be posted upon the bulletin board. No member of the faculty should be excused for failure to comply with such notices by reason of neglect to be informed. This and any other administrative plan to economize time for the greater purposes of the faculty activities period should be adopted and persistently followed.

h. *Assignments to teachers.* The willingness of teachers to accept assignments in faculty programs, particularly in those involving personal appearances before the faculty, will come gradually but none the less surely. The principal should first choose those members of the faculty who have had experience in speaking to an audience. By the power of the example of their associates the inexperienced will be persuaded to participate.

i. *The executive leader.* Careful deliberation and thoughtful consideration of the personal attributes of the faculty should characterize the principal's organization of all faculty programs, particularly that of the first semester or year. Each succeeding program will demand less administrative concern in matters of personal inclination and will accordingly permit greater concentration of real leadership in the program itself.

X. RELATIONS WITH LOWER AND HIGHER SCHOOLS

Relations with elementary schools. Resolution 9 quoted in the introduction of this manual places the responsibility for the education and training of all normal children of fourteen years of age or over on the high school. It is a fair implication that this responsibility should be assumed by the junior high school for children two years younger.

This resolution is significant of the new conception which emphasizes training and educating children rather than merely teaching subjects. It recognizes that the high school must not expect the children to be letter perfect in the content of the subjects taught in the lower schools. The meaning of much of the instruction in the fundamental operations will not be fully appreciated until the knowledge is applied in the high school. On the other hand, the high school—particularly the four-year high school—has a right to expect from the elementary school that children shall be able to read the English language with a fair degree of intelligence, to perform the four fundamental operations in mathematics including common and decimal fractions with fair rapidity and accuracy, to write legibly, to recognize the parts of speech in idiomatic English, and to express themselves in both oral and written form so as to be clearly understood. Children who lack any of these powers should be placed by the high school in classes for intensive drill, but the work done in these classes should not be counted for high school credit.

In many, perhaps in the majority of communities, it will not be possible at once to transfer to the high school all normal pupils of the ages described in this resolution. However, as the high school becomes more and more an institution of democracy devoted to the task of training leaders and intelligent followers for our governmental and social order; as its program of studies, its guidance program, and its administration become adapted to this social purpose rather than to instruction in subject matter alone, it will tend to include in its numbers all normal adolescents of the community and to adapt itself to their evident needs.

Relations with colleges. The college is not usually a structural part of the program for public education. With some notable exceptions, however, it is more and more coming to recognize that its function is to take the young people for whom the high school has done its best and to educate and train those who are prepared to profit by its instruction and are willing to make an honest effort

There is good reason to believe that the college is likely in the coming decade to seek its entering students on the basis of their ability to profit by college instruction rather than on the basis of their pursuit of specific studies in the school.

The conditions at the present moment of the transitional period are far from satisfactory. Both high school and college are badly crowded, and the colleges are reasonably seeking to select the best available material from the overwhelming number of their applicants. Among these applicants are many pupils with personal and parental ambitions beyond the ability of the young people. The colleges are wisely endeavoring to place their work on a basis of sound education rather than that of artificial and social values. They naturally deplore the deterioration in earnest effort and in ideals that has come from the prevalent fashion of "going to college".

Many of the wisest leaders in the college are recognizing that the traditional college entrance requirements stated in specific subjects and measured by examinations which can be successfully met by intensive drills are not giving them the best possible selection of entering students. Indeed, it is quite conceivable that no matter what specific requirements the colleges might make in subject matter, the possibilities of cramming in preparation for entrance requirements would always result in the admission of many undesirable students.

In Resolution 7 the high school men of the State have expressed their conviction that it is the duty of the high school to serve first the great mass of its young people "ninety per cent of whom will not go to college". Yet the situation is such that the individual principal often finds this almost impossible to do. The difficulty is not that the colleges are purposefully attempting to dictate to the high schools, but that traditions of educational values and of academic standards have not kept pace with the development of scientific educational theory. Coupled with this fact is a social and political condition that often makes the school practically helpless in its efforts to render better service to the majority of its clientele.

The principal's problem. The concrete situation in all but the large city high school is something like this: Of the entering class the principal knows that one in ten will want to go to college. He does not know which individuals will make up the favored group. What he does know, however, is that if any one of them is not prepared four years later to enter the college of his choice, the school and its principal will be severely blamed. He knows that many of the liberal colleges are radically revising their entrance requirements, but he also knows that many others seriously believe that education loses its best values when it is pursued for its practical application

and that they, therefore, require from eight to eleven specific units in foreign languages and mathematics. The subjects required by this college entrance group are definite, specific, and well established in educational practice. Subjects most likely to be valuable to the ninety per cent are wide in variety and in some cases more or less experimental. The non-college group is large, but its desires are neither clearly known nor forcibly expressed. If they are not gratified, the pupils simply vanish from the school, and the influential public is indifferent to their departure or the reason for their going. The principal is the servant of the community. The influential group in the community is the one from which the college students come—the group whose dissatisfaction the principal will be made to feel most keenly. He can hardly be blamed, therefore, if in all cases involving possible doubt he advises pupils to take the course which will give no chance of unfavorable reaction because the pupil has chosen a course that will not prepare him for the most exclusive college.

The necessity of coöperation between high schools and colleges. The solution of this difficult problem can not come from recrimination, *ex cathedra* pronouncements, or insistence upon inherited prejudices. No one group is particularly to blame; the condition arises as a part of almost revolutionary changes in our social, economic, and educational institutions. It is most unfortunate that the college and the high school have not attacked the problem together and sought through mutual understanding and concession to help each other in furthering—each in its own field—the interests of education for a democracy. It is particularly unfortunate that the problem of the secondary school has so often been presented from the point of view of the private school rather than from that of the public high school. The private schools are in many cases rendering a most valuable service, but their social and political relationships and their entire outlook are quite different from those of the public high school. Whenever colleges have confused the interests of the two types of secondary schools, the ultimate solution of the problem has been delayed.

A proper recognition of science. The hopeful view of the situation is seen in the tendency of many—indeed of the great majority—of the coeducational colleges and of the colleges for men to enlarge the list of subjects acceptable for college entrance and to diminish the specific requirements particularly in the lines of foreign languages and mathematics. In carrying out this movement many colleges have come to the point where they will accept three or four units of science and an equal number of units of history and the social studies. These are undoubtedly the two lines, in which the high schools can offer the largest possibility of service to

their commonwealths and communities and to the great mass of their students. Most of our first class high schools have good laboratory equipment and well prepared teachers. In spite of the high cost of teaching science in our high schools, the subject has always had the support of the communities. For the students who never go to college the study of several sciences is probably next to English and the social studies in its direct value as an interpretation of the life around them and as a basis for the work which they will have to do. Scientific courses almost invariably enlist the support of business men and of industrial leaders. Some of these science courses contain practical experiments that are not the less scientific because they are immediately applicable to life. For example: The Babcock milk test; the control of plant enemies, such as the potato blight; the control of bacteria in relation to food and health; the transmission of electrical energy; and many other experiments lose none of their scientific or educational value because they are of vital importance in every-day life.

History and the social studies. The value of history and the social studies grows out of the fundamental purpose of the high school in training citizens of a democracy. Whatever else the schools teach, they fail in their most vital function if they do not give to our young people an understanding of our civilization, its growth and development, and the fundamental laws governing its progress. The study of history has little concern with minute details and isolated facts; it should be primarily interested in those great institutions and those great movements which have determined our civilization and produced our present problems. It must appreciate the struggles of Anglo-Saxon civilization in evolving its present degree of liberty; it must understand such great movements as the Renaissance, the uprising of peoples in the French Revolution and succeeding similar movements, and the development of economic freedom working through the early stages of the industrial revolution down to the unsolved problems of today.

Similarly the study of civics, economics, sociology, and political science must be applied to the problems of the day and must carry with it an intimate acquaintance with the men and measures of current interest. The tendency of the colleges in all these matters has been to fail to appreciate the fundamental purpose of these studies or at least to fail to emphasize the new spirit which has come into the instruction in the best high schools.

Practical arts and vocational subjects. The high schools have found in thousands of cases that pupils can be saved for the school and for advanced education through various types of practical arts and vocational instruction. These have not generally been recog-

nized for college entrance. Perhaps the most striking illustration of the value of this work is seen in the work in commercial subjects. In the study of shorthand, for example, the pupil is held to the most exacting mastery of intricate and technical phonetic signs. She is required in the early stages to master the making of these into word equivalents. She is soon required not only to know the word signs, but to know them quickly and to read back the dictation. A little later this dictation is coördinated with typewriting. The pupil goes to the stenography class, takes down the dictation, then goes to the typewriting class, sometimes after several periods when her memory will give her less aid, and reproduces the material on the typewriter. She recites every moment in both classes, and the test is absolutely infallible. She does her task, or she doesn't do it. She and her teacher know at once where the slightest error occurs. If the new interpretation of mental discipline which places prime value upon habits is correct, there is good reason to believe that shorthand is as valuable a subject as can be taught in the secondary school.

Another change in high school administration long over-due seems likely to be consummated in the near future, and should be recognized in the reorganization of college entrance requirements. As noted elsewhere, the pupil whose major educational interest is music has had slight consideration for his paramount educational needs. Along with the recognition of music as a major subject of secondary education and the organization of a practical method of insuring satisfactory standards of effort and achievement in this important subject should go its acceptance as an integral element in preparation for college.

It is to be hoped that the colleges will recognize the decided changes that the last few years have produced in the personnel, the aims, the content of courses, and the methods of instruction in the high school; and that admission to college will be based upon honest attainment in any field, coupled with ability to do college work, rather than upon specific high school grades or examinations in a restricted group of traditional subjects. There is good reason to believe that a readjustment is well under way.

A table showing college entrance requirements. The following table shows the present conditions in a considerable number of colleges, including all those in Pennsylvania that make specific entrance requirements. This will doubtless be of value to high school principals in the practical work of advising pupils concerning their college preparation.

The subjects, both required and elective, are enumerated by units. In each case the minimum number of units is given.

The electives are usually required to be confined to English, mathematics, foreign language, history, and science. A very few

colleges only, allow the election of a unit or two from subjects that are not included in the traditional academic requirements.

The variation in the number of units in the various required subjects and in the number of units allowed for elective subjects is due to specific requirements for certain college curriculums. For example, the mathematical requirements for Bucknell are listed from 2 1/2 to 3. This means that an extra half year of mathematics is required as a pre-requisite for one of the courses in Bucknell. The variation appears again in the elective column because the pupil who wishes to take the course requiring three units of mathematics for preparation would have only four units elective instead of 4 1/2 open to a pupil who does not wish to take the course.

The variation appears considerably larger in some other institutions, but the principle applied is the same.

College	Course	Required					Elective	Total
		English	Math.	F. Lang.	Hist.	Science		
Albright	A. B.	4	2½	6	1½		2	16
	B. S.	4	2½	4	1½		4	16
Allegheny	—	3	2½	4	1	1	3½	15
Beaver	—	3	2½	2	1	1	5½	15
Bryn Mawr	—	4	2	10	1	1	0	18
Bucknell	—	3	2½-3	2	2	1	4-4½	15
Carnegie	—	3	3	2		1	6	15
Cornell	A. B.	3	2	5	1		4	15
	B. S.	3	4	3	1		4	15
Dickinson	—	3	2½				9-10	14½ -15½
Drexel	—	3	2	2	1	1	6	15
Franklin & Marshall	A. B.	3	2½	6	1	1	1	14½
	B. S.	3	3	2	1	1	4½	14½
Geneva	—	3	2	4	1	1	4	15
Gettysburg	A. B.	3	2½	6-7	0-1-2		1½-2½	15
	B. S.	3	2½-3	2-4	0-2		3½-5½-7	15
Grove City	A. B.	3	3	0		1	2	15
	B. S.	3	3	2		3	4	15
Hamilton	—	3	2½	5	1		3	14½
Haverford	A. B.	3	2½	6	1		2	14½
	B. S.	3	2½	4	1		4	14½
Irving	—	3	3	6			3	15
Juniata	A. B.	3	2½	3	1		5½	15
	B. S.	3	2½	2	1	1	5½	15
Lafayette	A. B.	3	2½	6	1	1	1	14½
	B. S.	3	2½-3½	3-4	1	1	3	14½
	Eng.	3	4	2	1	1	3½	14½
Lebanon Valley	A. B.	3	2½	5	1	1	2	14½
	B. S.	3	3	2	1	3	2½	14½
Lehigh	A. B.	3	2½	2	1		6½	15
	B. S.	3	2½	2	1		5½	14
	Eng.	3	3½	2	1		4½	14
Lincoln	—	3	2	2	1		7	15
Marywood	A. B.	3	3	6	1		2	15
Mt. Holyoke	—	3	3	6	1		2	15
Muhlenberg	A. B.	3	2½	6			3½	15
	B. S.	3	2½	3		1	5½	15
Oberlin	—	3	2½	4	1	1	3½	15
Pa. Col. for Women	—	3	2½	4		1	4½	15
Pa. Military College	—	2	3	2	2		2	11
Pennsylvania State	A. B.	3	2	4	1		5	15
	B. S.	3	2-3	0	1	2	4-5	15
Princeton	A. B.	3	3	7			2	15
	B. S.	3	4	5		1	2	15
Smith	—	3	2½	4	1		4	14½
Susquehanna	—	3	2½	1½	1	1	6	14½
Swarthmore	—	3	2½		2		7	14½
Syracuse	A. B.	3	2	5*	1*	1*	3	15
	B. S.	3	2	4		1	5	15
Temple	A. B.	3	2½	6	1		2½	15
	B. S.	3	2½	4	1	1	3½	15
Thiel	A. B.	3	2	6		1	4	16
	B. S.	3	3	4		1	5	16
University of Penna.	College	3	2	3-4	1		5-6	15
	Sci. School	3	3½	2	1	1	4½	15
	Wharton	3	1-2	0-2	1	0-1	8	15
	Education	3	2	2	1		7	15
	Archit.	3	3		1		8	15
	Fine Arts	3	1-2	2	1	0-1	8	15

College	Course	Required					Elective	Total
		English	Math.	F. Lang.	Hist.	Science		
Univ. of Pittsburgh	College	3			1		11	15
	Education	3			1		11	15
	Economics	3			1		11	15
	Eng.	3	3	2	1	1	5	15
Ursinus	A. B.	3	2½	5	1		3	14½
	B. S.	3	3½	3	1	1	3	14½
Vassar	—	3	3	6	1		2	15
Villanova	A. B.	3	2	5	2	1	3	16
	B. S.	3	2	2	1		8	16
	Eng.	3	4	3	2	1	3	16
Washington and Jefferson	A. B.	3	2½	3			6	14½
	B. S.	3	2½	2			7	14½
Waynesburg	—	4	2		1		8	15
Wellesley	—	3	3	6	1		2	15
Westminster	A. B.	3	2	7			3	15
	B. S.	3	2	4		2	4	15
Wilson	—	3	3	4	1		4	15

*Recommended. All candidates for the A. B. degree are required to have a total of seven years of foreign language.

XI. PRACTICAL ARTS AND VOCATIONAL EDUCATION

Definition. The term, *practical arts*, is the broad, inclusive term that is used to designate a number of phases of instruction that are primarily designed to give learners an appreciative knowledge of materials, tools, and processes, and of design as it applies to man's activities. This term covers such phases of education as manual training, industrial arts, household arts, mechanic arts, general home economics, general agriculture, and general commercial education.

1. *Industrial arts education.* Industrial arts education includes that part of practical arts education which pertains to instruction based largely upon participation involving tools, materials, and processes significant to present-day society, and pertaining to the industrial field. Industrial arts instruction is essentially general education, and is very desirable because of both its direct and its indirect values. It should be required of all boys in the sixth, seventh, and eighth grades wherever circumstances permit, for at least two periods per week, and should be offered in high school either as a required subject in the industrial arts course or as an elective for boys taking such courses as the commercial or the college preparatory course.

Industrial arts instruction usually has great value for purposes of vocational guidance, and it is desirable to precede vocational industrial education with industrial arts instruction. While vocational industrial education and industrial arts education are correlative aspects of one educative process, they are nevertheless quite distinct as to objectives and as to means and methods of instruction.

Industrial arts education stands for something more than traditional manual training. It is the outgrowth of the manual training movement, but is broader in its scope. Instead of limiting the instruction to handwork in one material, as for example wood, a definite effort is made through information about, and use of a number of materials of construction to give as broad a knowledge as possible. School instruction should furthermore be amplified by visits to industrial establishments.

A sample program of a high school curriculum in which industrial arts instruction as a form of general education is given follows herewith:

Industrial Arts Curriculum

First Year	Units	Second Year	Units 1st term	Units 2nd term
English	1	English	½	½
Health Instruction	Partial	Health Instruction	Partial	Partial
Civics	1	European History	½	½
General Science	1	Geometry	½	½
General math. or Alg.	1	Pattern making	½	0
Woodwork / Drawing	1	Sheet metal molding	—	½
		Drawing	Partial	Partial
		Biology or physical science	½	½

Third Year	Units 1st term	Units 2nd term	Fourth Year	Units
English	½	½	English	1
Health Instruction	Partial	Partial	Health Instruction	Partial
U. S. History	½	½	Problems of Democracy	1
Smithing	½	—	Phys. and Hygiene	Partial
Elem. machine	—	½	Machine	1
Drawing	Partial	Partial	Drawing	Partial
Chemistry or Physics	½	½	Physics or Chemistry	1
Elective	1	1	Commercial and Economic Geog.	1

General agricultural education. There are several types of general agricultural education designed for high schools, such as instruction in technical agriculture, junior project work, and school gardening. The purpose of these types of work is primarily cultural, the aim being to increase the pupil's knowledge of the arts rather than to give actual practice in agriculture.

Technical agricultural instruction. Technical agricultural instruction includes the study of the scientific principles underlying farming, as well as the relation of these principles to the production of plants and animals of economic value. Certain laboratory experiments to demonstrate the theory being studied are performed in connection with this type of instruction.

Junior projects. Junior project work is designed primarily for rural pupils of the seventh and eighth grades. Similar work may be carried on in the high school grades. Junior project work includes the study of the fundamentals of general agriculture and the application of the knowledge gained through the home project. The purpose of junior project work is to discover the aptitudes and inaptitudes of the children through supervised home project work.

School gardening. School garden work is designed primarily for urban pupils of the fifth to ninth grades. A limited amount of such work may, however, be carried on with the later high school grades. School garden work consists of the production of garden crops under capable supervision, preceded by a study of soils, seeds, and plants, and by a study of their various functions and uses. The purpose of such work is to develop a sympathetic understanding of the fundamentals of crop production and to learn to apply this knowledge to the beautification of the home and the community, and to the production of vegetables and flowers in the home garden.

General Agricultural Curriculum

First Year	*Units*	*Second Year*	*Units*
English	1	English	1
Civics	1	European History	1
General Science	½	General Science	½
Health Instruction	Partial	General Agriculture	½
*General Agriculture	½	Health Instruction	Partial
General Mathematics	1	Elective	1
Drawing	Partial	Drawing	Partial
Music	Partial	Music	Partial

Third Year	*Units*	*Fourth Year*	*Units*
English	1	English	1
American History	1	Problems of Democracy	1
Chemistry or Physics	1	Health Instruction	Partial
Health Instruction	Partial	Physics or Chemistry	1
Elective	1	Elective	1
Drawing and Music Optional		Drawing and Music Optional	

*Includes home project correlating with subject matter.

An additional subject can be included in the curriculum if major subjects are given four periods per week.

For details relative to general agricultural education, address the Department of Public Instruction.

Vocational education. The term, *vocational education*, is used as the broad, inclusive term which includes four major phases, namely:

1. Vocational industrial education
2. Vocational agricultural education
3. Vocational home economics education
4. Vocational commercial education

Full information relative to these various forms of vocational education may be obtained from the Vocational Bureau of the Department of Public Instruction.

Vocational industrial education—definition. By vocational industrial education is meant that form of industrial education which

aims to fit an individual in some definite degree to pursue effectively a recognized trade or occupation. It is given to persons over fourteen years of age, and in order to be termed "vocational" the instruction must, according to the Federal Education Act, be of less than college grade. Such instruction must also meet other Federal and State requirements as mentioned under "Conditions of Approval".

Difference between pre-vocational and vocational industrial education. Vocational industrial education differs from pre-vocational education. In pre-vocational education the objective is to give certain experiences that assist pupils in finding out what they are best fitted for by nature, temperament, and native capacity. In vocational industrial education it is assumed that the learner has definitely selected his trade or vocation. If it found that a learner ought to change his trade or vocation the matter should be adjusted.

Difference between technical and vocational industrial education. There is also a difference between industrial education as usually given in public technical high schools, and vocational industrial education. Unit trade classes must by Federal Board requirements devote at least fifty per cent of the time given to instruction to shop work or practice of the trade that is being learned. This is not usually done in technical high schools except where classes are definitely organized in accordance with the requirements set up for vocational industrial education. This is not the only reason why the usual industrial education that is taught in technical high schools does not qualify under the requirements of the Federal Vocational Education Act. As a rule, the graduates of technical high schools are qualified to enter college. Pupils taking vocational industrial courses in unit trade classes are prepared to enter trades and vocations on a productive basis. They may, if they wish, prepare for college by taking an additional year of instruction. This is done quite frequently.

Difference between industrial arts education and vocational industrial education. There is considerable difference between industrial arts education and vocational industrial education. One of the primary purposes of industrial arts instruction is to give, through study and shop experience, an appreciative knowledge of materials, tools, and processes, and of design as it relates to important human activities. Vocational industrial education, on the other hand, aims to make efficient producers in the broad sense of the word. The former aims to develop an appreciative knowledge of many kinds of industrial activity, the latter to make an efficient producer in some single trade or occupation.

Types of vocational industrial education—Day Schools. Cities having a population of less than 25,000 may establish what are

termed *general industrial* schools or classes. Instead of limiting the trade practice or shop instruction of any learner to a single trade as is done in schools organized on the unit trade plan, the general industrial school gives instruction to a learner in a group of related trades. This gives a more limited experience in any single trade, but a wider experience in terms of the number of trades engaged in. From the standpoint of developing trade efficiency the general industrial school is not as satisfactory as the unit trade school, and is essentially a compromise that has been made because cities of less than 25,000 population sometimes find it difficult to organize day vocational industrial instruction on the unit trade basis.

Unit trade courses. Cities having a population of over 25,000 may receive reimbursement under the Smith-Hughes Act for day vocational industrial education if it is organized on a unit trade basis. A unit trade school or class established under the Federal Act is a public school or class established and maintained in any community for the purpose of fitting persons for useful employment in a particular trade or industrial pursuit through instruction of less than college grade: (a) designed to meet the needs of persons over fourteen years of age; (b) giving not less than half of the time to practical work on a useful or productive basis; and (c) extending over not less than nine months, (36 weeks) per year, and not less than thirty (clock) hours per week. Full compliance with an adopted and approved state plan is also required.

When a group of young men over fourteen years of age not yet employed attend an all-day school or class for the purpose of preparing for entrance into the plumbers' trade, and when the instruction given them in both shop and related class work is based solely upon the plumbers' trade needs, this constitutes a unit trade school or class.

The following is a suggestive sample course of instruction for a three-year unit trade course. Courses may vary greatly in length and in kind. It will be noted that thirty clock hours of instruction are required per week in the type course shown. Of these fifty per cent, or fifteen hours, must be devoted to practice of the trade (shop instruction). Approximately thirty per cent should be given to "related" subjects, and twenty per cent to "non-vocational" subjects.

(Type course. Vocational industrial education, unit trade type)

Year 1

Trade Practice	*Periods per week (45 min.)*	*Related*	*Periods per week (45 min.)*	*Non-vocational*	*Periods per week (45 min.)*
Shop Work	20	Mech. Drawing	5	English	5
		Mathematics	4	Civics	5
		Hygiene	1		
Total	20 (50%)	Total	10 (25%)	Total	10 (25%)

Year 2

Trade Practice	*Periods per week (45 min.)*	*Related*	*Periods per week (45 min.)*	*Non-vocational*	*Periods per week (45 min.)*
Shop Work	20	Mech. Drawing	5	English	5
		Mathematics	5	History	3
		Trade Theory	2		
Total	20 (50%)	Total	12 (30%)	Total	8 (20%)

Year 3

Trade Practice	*Periods per week (45 min.)*	*Related*	*Periods per week (45 min.)*	*Non-vocational*	*Periods per week (45 min.)*
Shop Work	20	Mech. Drawing	4	English	5
		Science	5	Economics or Problems of Democracy	2
				Elective	4
Total	20 (50%)	Total	9 (22½%)	Total	11 (27½%)

Length of periods. Schools which have standard periods of sixty minutes each, as is recommended by the Department, may reduce the number of separate periods, provided the proportion of time devoted to vocational work is not reduced and provided the minimum hour requirements are met. See Bulletin on State Plan for Vocational Education.

It should be understood that out of every clock hour scheduled in instruction for which outside preparation is required, a half-hour may be devoted to supervised study in the classroom or laboratory where such instruction is given, and that it must be supervised by the teacher giving such instruction, if such instruction is to be reimbursed out of Smith-Hughes funds. This applies to general industrial schools and classes, and unit trade schools and classes.

Part-time coöperative schools or classes. By part-time coöperative industrial education is meant that of vocational industrial education that is given in accordance with a plan which provides that the learners spend alternate periods of a day, a week, or two weeks in industry and in school. Two learners are used for any given position in industry. While one of them is attending school his mate is "holding down the job". It is common practice for employers to pay part-time coöperative employees at the prevailing apprenticeship rate for the actual time spent by the latter on productive work in industry. By means of such a plan the combined educational resources of industry and of the schools may be used for purposes of public education.

Evening schools and classes. The large majority of industrial workers must be reached, if they are to be reached at all, by means of appropriate evening instruction that is given either in schools or in industrial establishments. In the majority of cases the vocational

instruction that may best be undertaken by the schools will be in the field of related subjects such as trade mathematics, shop sketching, blue print reading, steel square, slide rule, etc., which require little equipment and involve but little expense. When shops are available for evening instruction they may well be used for vocational classes. Smith-Hughes funds are available for trade extension classes such as those mentioned. The learners must be at least sixteen years of age, and the instruction given must be supplementary to the daily employment.

Synopsis of administrative requirements—surveys or investigations. The Department of Public Instruction is authorized and directed by law to see that surveys or investigations are made, and to assist school districts to this end. (School Code, Article XXXIV, 3407).

Approval to conduct schools or classes. Written approval is required to conduct trade and industrial schools or classes for which Smith-Hughes aid is expected.

Curriculum. The curriculum must be approved in writing. Significant changes in the curriculum must likewise be approved.

Time requirement:

a. *Unit trade, 1.* In cities over 25,000. Time devoted to related and non-vocational instruction must not exceed time spent on shop work. Latter given for minimum of thirty clock hours for thirty-six weeks per year.

2. In cities of less than 25,000 requirements same as above except that minimum time for shop work is twenty-five hours for thirty-six weeks per year.

b. *General industrial.* Same as a 2.

c. *Part-time co-operative.* Minimum length of school term not less than one hundred and forty four hours per year.

Time distribution.

Type of Instruction	Per cent to Shop Subjects	Per cent to Related Subjects	Per cent to Non-vocational subjects
a. Unit trade	50 or more	22½ to 30	20 to 27½
b. General industrial	50 or more	22½ to 30	20 to 27½
c. Part-time cooperative	50 or more	to be approved	by the Dept.

Productive work. Shop must be on a useful and productive basis.

Minimum age. Attendance upon unit trade and general industrial classes: fourteen years or over. (School Code Art. XXXIV, 3408). For evening trade extension classes, sixteen years or over.

Control. Must be under public supervision and control.

Location. The location must be approved.

Equipment. The building and equipment must be approved.

Size of classes. **Minimum attendance of ten. A group of from fifteen to eighteen is a desirable number for a class. Classes in shop and related subjects should not exceed twenty.**

Qualifications of teachers. Teachers must be properly certified.

Methods of instruction. Must be approved.

Reimbursement. Reimbursement is made for the salaries of teachers. School districts are eligible for two-thirds of the amount spent for instruction (in accordance with the requirements of the Department of Public Instruction) during the previous school year, but no school district shall receive more than $10,000 for vocational education in any one year. (Continuation school funds not included).

Vocational agricultural education. The purpose of vocational agricultural education is to train boys fourteen years of age and over for the vocation of farming. Instruction in vocational agriculture differs from instruction in general agriculture in that it includes both the theory and the practice, while general agricultural instruction is informational in character and is designed to increase the individual's vocational intelligence rather than his occupational efficiency.

Vocational agricultural instruction as offered in Pennsylvania is of three types: All-day school, part-time, and evening class instruction. By all-day school instruction is meant such instruction in vocational agriculture in regular high and vocational schools as is offered daily during the entire school year. This type of school is especially adapted to young men between the ages of fourteen and eighteen. By part-time instruction is meant such instruction as is offered to young men who have already taken up the vocation of farming. This type of instruction is especially adapted to young men between the ages of eighteen and twenty-five. Such instruction may be given for from two to four months during the slack season. Classes may meet from two to four times each week. By evening-class instruction is meant such instruction in vocational agriculture as is offered in classes meeting on from two to four evenings weekly, during the slack season. Such instruction is especially adapted to men who are following farming as a vocation.

Agricultural Curriculum for Rural Community Vocational Schools and Departments of Vocational Agriculture

First Year

Vocational and related subjects (½ day)	*No. Periods weekly (45 min.).*	*Academic subjects*	*No. Periods weekly (45 min.)*
General Science	3	English	5
Poultry ½ yr. Vegetable &		Civics	5
Ornamental Gardening ½yr.	7	Health Instruction	2
Farm Shop, including		*Elective	5
Mechanical Drawing	4		
Project Study	1		
	15		17

	Second Year		
Farm Crops	5	English	5
Animal Husbandry or		European History	5
Dairying	5	Health Instruction	2
Farm Shop	4	*Elective	5
Project Study	1		
	15		17
	Third Year		
Dairying or Animal		English	5
Husbandry	5	Chemistry or Physics	5
Fruit Production and		Health Instruction	2
Forestry	5	*Elective	5
Farm Shop	4		
Project Study	1		
	15		17
	Fourth Year		
Farm Management and		English	3
Farm Accounts	6	Problems of Democracy	3
Rural Sociology and		Health Instruction	2
Rural Law	5	American History	5
Farm Mechanics	3	*Elective	5
Project Study	1		
	15		18

*Electives may or may not be taken during the first two years. The necessity for permitting some pupils to take but two academic subjects yearly, for at least the first two years, is apparent. American History may be taken in either third or fourth year.

Schools, which have standard periods of sixty minutes each, as is recommended by the Department, may reduce the number of separate periods, provided the proportion of time devoted to vocational work is not reduced.

Note: High schools may offer either a two or a four-year course. The daily program of studies shall be arranged so that half the day will be devoted to agricultural work. The vocational group shall be under the jurisdiction of the teacher of agriculture for a full half day.

Minimum Requirements for State and Federal Aid for Vocational Agricultural Education.

1. Submission of a written application to the State Department of Public Instruction.
2. Approval for the establishment of a rural community vocational school or a high school department of vocational agriculture.
3. At least twelve boys fourteen years of age or over enrolled for instruction in vocational agriculture.
4. Graduate of standard agricultural college, with farm experience and special training for teaching vocational agriculture to be employed as teacher on a twelve months' basis.
5. Approved agricultural curriculum.
6. Necessary equipment.
   a. A well equipped combination laboratory and recitation room.

b. A well equipped farm shop room.
c. Reference books on vocational agriculture.
d. Available bulletins, catalogued.

7. Approved methods.
a. Definite plan of work.
b. One-half of each school day devoted to agricultural instruction consisting of recitation, supervised study, field trips, demonstrations and laboratory exercises.
c. Completion of a project by each pupil enrolled for vocational agriculture.

General Home Economics Education

Terminology. Many different terms are used in Pennsylvania to refer to the field of education that relates directly to the home, and there are many different interpertations of these terms. In some centers the term *domestic science* is used to cover the entire field of education for the home; in others it is used to cover that part of the field that deals with foods and cookery and the care and mangement of the home; while in still others it is used to mean only cooking. Likewise the terms *household economics*, *domestic economy*, and *domestic arts*, are used to refer to the whole and to parts of the field, and the terms *household economy, household arts, home making* and *home economics* are used to refer to the entire field. This varying use of terms often results in confusion, and it is suggested by the home economics syllabus committee, that, since the term *home economics* is the one that has been most broadly accepted throughout the country to refer to the whole field of education for the home, this term be also adopted for general use in Pennsylvania. The term is an inclusive one used to designate both general home economics and vocational home economics.

Definition. The term *general home economics* is used to designate that phase of home economics education which is given to girls and women as a part of their general education and which contributes to all-around development of the individual girl or woman.

General home economics instruction. In the education of every girl, courses in general home economics should have a prominent place because of their importance to her and to others whose welfare may be directly in her keeping. Every girl lives in a home of some kind and should participate to a greater or lesser extent in the activities of this home. Courses in general home economics should help her to live well in her home and in her community, to become a better citizen, and to appreciate the finer things in life.

Courses in general home economics should be more than courses in cooking and sewing. They should include work in foods and cookery, clothing and textiles, millinery, laundering, care of the home, household accounting, care of children, care of the sick, planning and

furnishing the home, social life in the home, and many other phases of work based upon the activities of the home.

The majority of girls who enter wage-earning occupations directly from school remain in them for only a few years and then enter upon the vocation of home making. The elementary and secondary schools offer "the only assured opportunity to prepare for that lifelong occupation, and it is during this period that they are most likely to form their ideals of life's duties and responsibilities. Work which is carefully designed to develop capacity for an interest in the proper management and conduct of a home should be regarded as of importance at least equal to that of any other work. Pupils should be led to respond to present duties and, at the same time, their interest should be aroused in problems of adult life. With present duties as a point of departure, home-making education should arouse an interest in future home-making activities and with that interest as a basis give the training necessary."*

Groups to be served. In school systems that are organized on the 8-4 plan, the seventh and eighth grades should be considered as a unit. In systems organized on the 6-3-3 plan the seventh, eighth, and ninth grades should be considered as a unit. Courses in home economics should be made a definite part of the required work for all girls in these units above the sixth year.

The foundation for this work should be laid in the first six grades of the elementary school, not in a program of home economics, but in a practical arts program. For the great majority of boys and girls in the first grades, the elementary school curriculum should include a practical arts program which should be the same for boys and girls. In this practical arts program there should, of course, be many phases of practical work drawn from the fields of food, clothing, and shelter, and there should be included many projects, drawn from the arts of the household, which boys and girls will elect, and which will very definitely play a part in contributing to worthy home membership in the families of these boys and girls. This practical arts work should be of such a nature as to meet needs common to all boys and girls.

In some of the elementary schools, however, there may be special groups for whom special class work in phases of home economics should be planned. If the percentage of drop-outs is exceedingly high at the end of the sixth grade, then special courses in home economics should be planned for the girls in the fifth and sixth grades

*"Cardinal Principles of Secondary Education"—Bureau of Education, Washington. Bulletin No. 35 of 1918.

of these schools.* If there are over-aged girls or mentally retarded girls, they too should have special courses in home economics in the fifth and sixth grades organized to meet their specific needs. In the high schools, unit-courses and curriculums in home economics should be available.

Courses and curriculums. The work in home economics offered in the public schools may vary in extent from single-unit semester courses to intensive four-year curriculums.

In outlining the foundation courses in home economics offered in the fifth to the ninth grades inclusive, each year of work should be a unit in itself, organized so as to be of specific value to those girls who may drop out of school at the end of the year. The work should at the same time be so planned that it may form a definite basis for the following year of work in home economics.

The basis for outlining each unit-course of study should be an analysis of the home activities of each group of girls enrolled for the course. This analysis will undoubtedly reveal the fact that the girls participate in many of the activities of the home. Therefore, if a course of study is to serve in meeting the immediate and present-day needs of the girls enrolled, it must be more than a course in sewing or a course in cooking. One of the purposes of general home economics instruction should be to help girls do better those things which they of necessity must do in the performance of home duties. This means that the content of the course of study should be chosen from the entire field of home economics for each unit-year of work offered, and that it should be of such a nature each succeeding year as to be of greater helpfulness to each girl in interpreting and in meeting her daily needs and responsibilities in home, school, and community.

In the high school, unit-semester and unit-year courses should be available to all girls who desire to elect home economics and who are enrolled in academic, commercial, general, or in other curriculums. The content of each course of study should be carefully designed to meet the needs of each specific group of girls. For example, the girls in a commercial curriculum upon graduation expect to enter a commercial pursuit. They may desire to elect a unit-semester course in clothing which is planned to meet their specific clothing needs when they become business women. The work should be such as to help them in securing the information which they need about economic values of clothing; to help them in developing an appreciation of good materials, of good design, of good color combinations, of the appropriateness of various kinds of clothing to various kinds of occasions, and of good taste in business dress. It should

*The syllabus for the seventh and eighth grades will be practicable for such exceptional schools.

develop high standards and should enable them to select and purchase their clothing economically and intelligently. Short units of such nature and character as to meet the needs of other specific groups of girls in the high school should be offered.

Some of the high schools of the State desire to offer technical three-year and four-year curriculums in general home economics. Since there must be a common core of required subjects in all curriculums, the following has been set up as a basis for organizing all curriculums in general home economics:

First Year	*Units*	*Second Year*	*Units*
English	1	English	1
Civics	1	European History	1
General Mathematics**	1	General Science** (if not given the first year)	1
Health Instruction	Partial	Health Instruction	Partial
Third Year		*Fourth Year*	
English	1	English	1
Chemistry	1	Problems of Democarcy	½
Health Instruction	Partial	American History	½
		Health Instruction	Partial

Out of a total of sixteen units of work required for graduation, from a four-year high school, a minimum of four units must be in the field of general home economics if it is to be classed as a general home economics curriculum. These four units may be distributed throughout the four years or may be concentrated in two or three years. The maximum number of units that may be in the field of general home economics is six. In addition to completing the nine academic subjects listed in the core curriculum, and the minimum or maximum number of units of work in home economics, there will be additional academic courses that must be elected.

Three-year home economics curriculums following a junior high school course should include a minimum of three units of home economics work. The core curriculum given above for second, third, and fourth years would apply to such courses.

Reference should be made to the lists of elective courses given on page 30 when selecting these courses.

Since there are many different ways of arranging the home economics courses in a curriculum; a number of suggestive arrangements have been set up and may be obtained upon application to the Department of Public Instruction.

**The place of general science and general mathmatics may be interchanged.

Vocational Home Economics Education

Definition. Vocational home economics is that form of vocational education which has for its controlling purpose the fitting of girls and women for efficient service and for useful and profitable employment in the occupations and in the management of the home.

Types of schools and classes. Vocational home economics is offered in three types of schools and classes—all-day, part-time, and evening.

Instruction in vocational home economics may be offered daily throughout the school year to girls who desire this type of instruction while they are still in attendance in secondary schools.

Courses in vocational home economics may also be offered on a part-time basis. Girls who are gainfully employed and are enrolled in general continuation schools may devote a part of their school time to courses in home enconomics. Girls and women who have left school may return for courses of instruction in vocational home economics on a part-time basis.

To the large numbers of girls and women who are following industrial, commercial, and professional pursuits, there may be offered in evening schools and classes short unit courses designed to fit these individuals either to take up the vocation of home-making or to pursue it more effectively if they have already entered upon this vocation.

Minimum Requirements for State and Federal Aid.

1. *Approval to conduct schools or classes.* Written approval from the Department of Public Instuction is required in order that a school district may conduct vocational home economics schools or classes under the State and Federal Vocational Education Acts.

2. *Supervision and control.* The law provides that in order to receive State and Federal aid, all schools and classes of vocational home economics must be under public supervision and control and must be designed to fit for useful employment in some phase of home economics work.

3. *Age of pupils.* The minimum age requirement of pupils in day schools, as written into the Federal Vocational Education Act, is fourteen years, The factors which should determine entrance to the course are the maturity of the girl and her desire for vocational training in home-cooking.

The minimum age requirement for entrance into evening schools and classes is sixteen years.

4. *Time allotment.*

(a) *For day schools.* The school year must consist of at least nine months. The total hours of instruction (academic and vocational) per week in cities over 25,000 will be thirty 60-minute hours—six hours per day. In cities of less than 25,000 the hours of instruction per week may be twenty-five 60-minute hours-hours per day.

In a six-hour school day, one half the day, or 180 minutes, must be devoted to practical subjects, or to practical and related subjects. This makes a weekly total of 900 minutes. In a five-hour day, one-half the day, or 150 minutes, must be devoted to practical subjects, or to practical and related subjects. This makes a weekly total of 750 minutes.

As stated above, the vocational half-day may be devoted entirely to practical work, or to a combination of practical and related work. In case the latter is desired, the proportion between these two phases of work may be met as follows:

School Day	*Total Vocational Time*	*Proportion of Practical and Related Subjects*	
6 Hour	180 Min. Daily	practical 120 Min.	maximum
		related 60 "	maximum
	900 " Weekly	practical 600 "	maximum
		related 300 "	maximum
5 Hour	150 " Daily	practical 90 "	maximum
		related 60 "	maximum
	750 " Weekly	practical 450 "	maximum
		related 300 "	maximum

(b) *For part-time schools and classes.* The length of course for part-time home economics schools and classes must not be less than 144 hours of classroom instruction per year. The minimum number of hours per week is four, of which at least one-half of the time, or two hours, must be devoted to home economics. The remaining time may be devoted to related or general education subjects.

(c) *For evening schools and classes.* Courses in vocational home economics in evening schools and classes are to be organized in short units. The length of the units should be determined entirely by the needs of the pupils enrolled in these courses.

5. *Segregation.* Pupils taking vocational work are to be segregated for the practical and related subjects that make up the vocational half-day. It is recommended that they take their academic work with the regular academic classes.

6. *Plant and equipment.* The plant and equipment necessary for a comprehensive course in home-making in day schools are the following:

(a) A clothing laboratory and fitting space
(b) A foods laboratory
(c) A dining room
(d) A unit (or family) kitchen is desirable.
(e) Adequate provision should be made for teaching home nursing, house care, laundering, and the other phases of home-making work that are to be given. This may be done by providing appropriate rooms, including a bath room, in the school building or in nearby homes. For the course in laundering the equipment may be placed in one end of the clothing laboratory or the foods laboratory if either room can adequately accommodate the work.

The plant and equipment for part-time and for evening schools and classes must be sufficient for the line of work undertaken.

7. *Qualification and certification of teachers.* All teachers of vocational home economics must hold vocational certificates issued by the Department of Public Instruction entitling them to give instruction in this field of work.

8. *Reimbursement.* Reimbursement from State and Federal funds, made available through the State and the Federal Vocational Education Acts, will be made to school districts which operate approved departments of vocational home economics in accordance with the requirements as herein set forth. The amount of reimbursement is two-thirds of the salaries of supervisors and teachers of vocational home economics, subject to the general provisions stated in page 131.

9. *Curriculums and courses.* Work in vocational home economics vaying in extent from one to four years is being offered in the secondary schools of the State.

Since there must be a common core of required subjects in all-day curriculums, the following has been set up as a basis for organizing all curriculums in vocational home economics:

First Year	*Units*	*Second Year*	*Units*
English	1	English	1
Civics	1	European History	1
Health Instruction	Partial	Health Instruction	Partial
Third Year		*Fourth Year*	
English	1	English	½
Chemistry	1	Problems of Democracy	½
Health Instruction	Partial	American History	1
		Health Instruction	Partial

A minimum of two academic subjects and health instruction is required in the academic half-day of each and every one of the four years of the curriculum in which vocational work is offered. When pupils demonstrate their ability to carry more than two academic subjects they may do so.

The courses of study in part-time schools and classes should consist of such practical and technical work in home economics as will be adapted to the groups of pupils enrolled for the work. They should be such as to increase the vocational competency of the pupils and should also contribute to their general education.

The content of the unit courses in home-making offered in evening schools and classes should be determined entirely by the needs of the individual pupils enrolled in each course.

There is a wide range of adaptations that may be made in arranging the courses in home economics to meet the needs of specific groups to be served. A number of typical and suggestive curriculums in vocational home economics for day schools, and lists of unit courses in home-making for part-time and evening schools may be obtained upon application to the Department of Public Instruction.

Each course and curriculum in vocational home economics must be approved by the Department of Public Instruction if State and Federal aid are to be granted to school districts in which such work is offered.

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